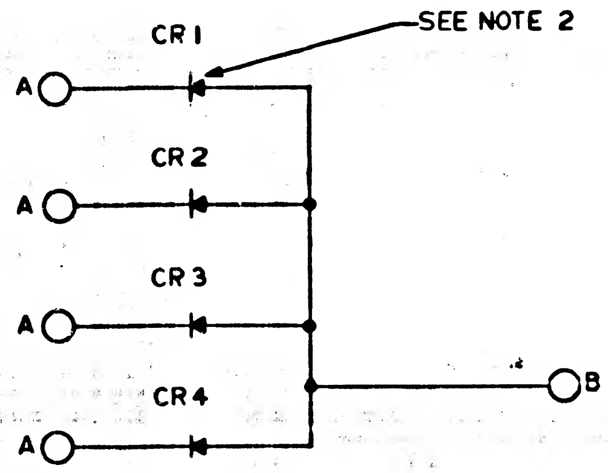
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1006002

REVISIONS

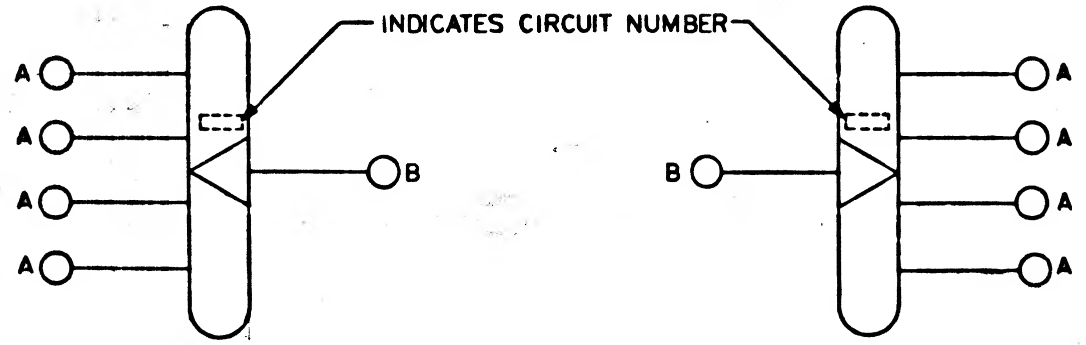
SYM	DESCRIPTION	DATE	APPROVAL



SCHEMATIC

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00001 **DATE** 7-13-62



SYMBOL

ALTERNATE SYMBOL ORIENTATION

PEFERENCE :
1. MECHANICAL ASSEMBLY DWG. 1003002
2. TEST IN ACCORDANCE WITH TEST SPEC ATP 1003002

PARTS LIST FOR ENGINEERING REF. ONLY

NOTES :
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. FOR DIODES SEE FIND NO. 1

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
4	1006751	DIODE, SILICON, LOGIC	1

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO.
CONTRACT
DRAWN BERKELEY DATE 7-9-62
CHECKED Joe Martoni
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DA CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006002
SCALE —
WT —
SHEET OF

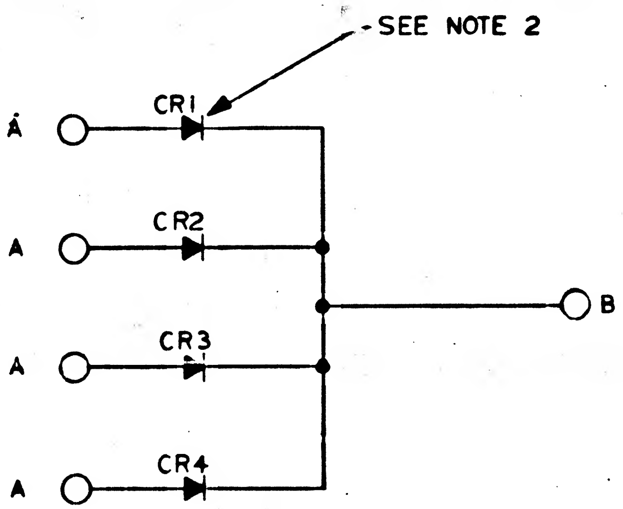
1006002

E009001

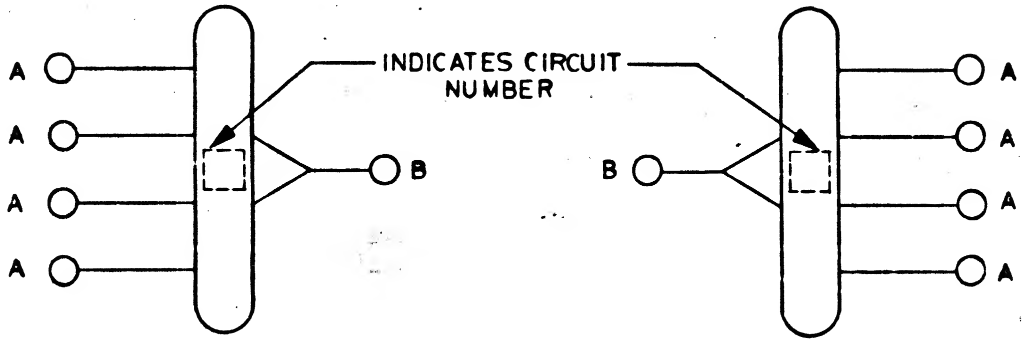
SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.



SCHEMATIC



SYMBOL

ALTERNATE SYMBOL ORIENTATION

NOTE:
1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2- FOR ALL DIODES SEE FIND NO. 1

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00001 **DATE** 7-13-62

REFERENCE:
1. MECHANICAL ASSEMBLY DRAWING 1003003
2. TEST IN ACCORDANCE WITH TEST SPEC. ATP 1003003

PARTS LISTS FOR ENGINEERING REF. ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
4	1006751	DIODE, SILICON, LOGIC	1

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN R. CHIN DATE 7/6/62
CHECKED Joe Martin
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnes
MIT APPROVAL Perry K Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DK CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006003
SCALE —
WT —
SHEET OF

1006003

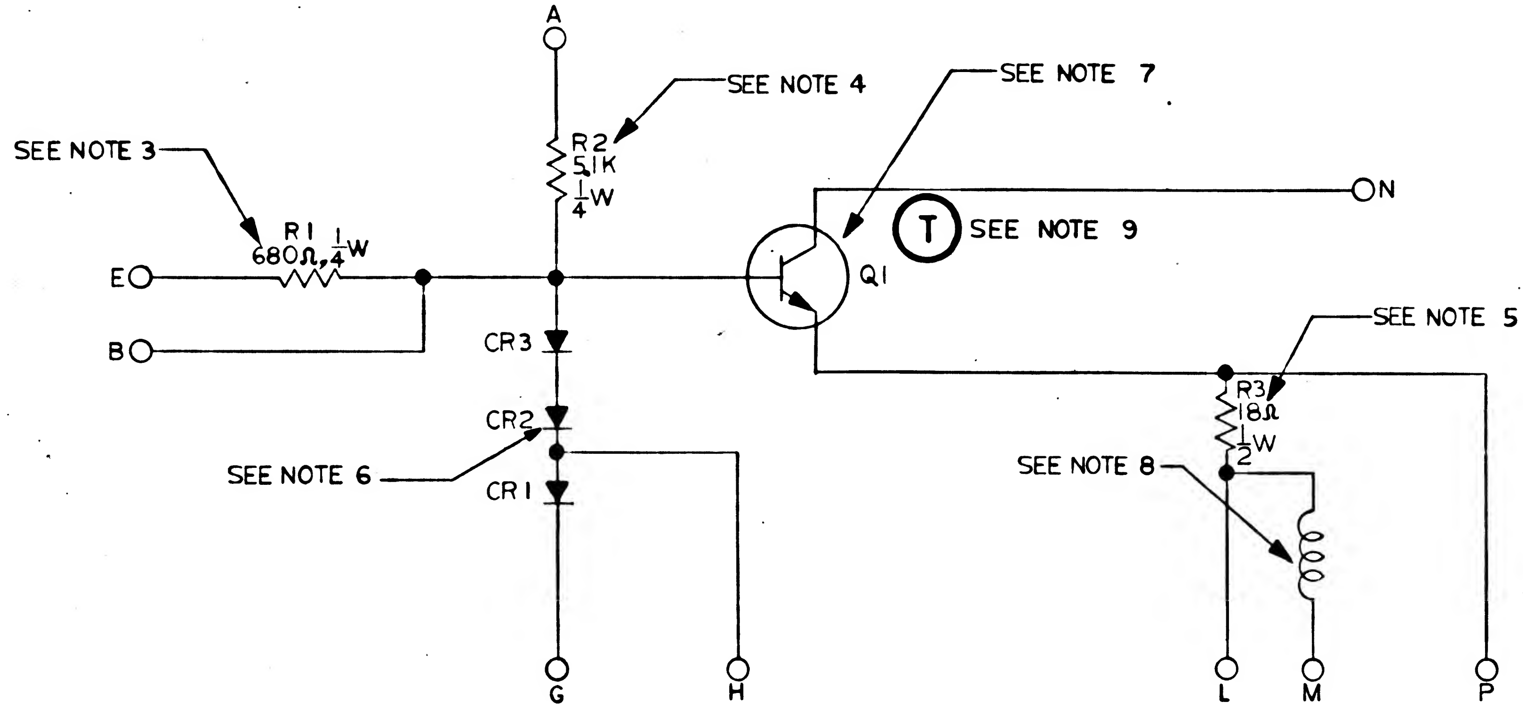
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

CIRCUIT TYPE	CURRENT (ma)	CONNECTION 1	CONNECTION 2	CONNECTION 3	COIL PART NO	COIL VALUE
HA	40	E	H	L		
HB	80	E	G	L		
HG	40	E	H	M	1006779—1	8.2uh
HH	80	E	G	M	1006779—2	3.9uh

8009001 Ⓜ

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REMOVED CIRCUIT TYPES HC,HD,HE,HF,HJ,HK, REMOVED PINS F,J,K,D, REMOVED 1.0 UH COIL, RESISTORS AND DIODES RENUMBERED, PARTS LIST AND NOTES REARRANGED TO CORRESPOND WITH DRAWING ADDED COIL TABLE TDRR 00032	9-24-62 9/27/62	



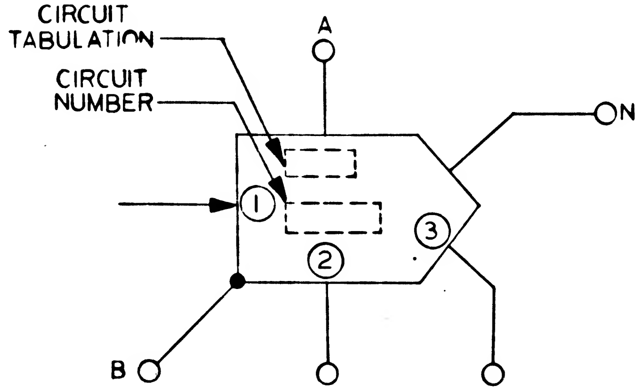
FOR INFORMATION ONLY

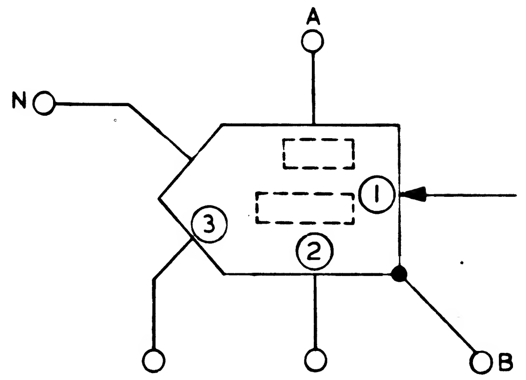
CLASS B RELEASE TDR No. 00001 **DATE** 7-13-62

REFERENCE:
1. MECHANICAL ASSEMBLY DRAWING 1003010
2. TEST IN ACCORDANCE WITH TEST SPEC. ATP 1003010

PARTS LISTS FOR ENGINEERING REF. ONLY

1006008



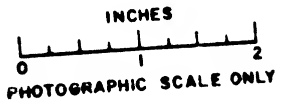


ALTERNATE SYMBOL ORIENTATION

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006759	TRANSISTOR NPN MEDIUM POWER	5
3	1006751	DIODE SILICON LOGIC	4
1	1006760-7	RESISTOR, 18Ω 1/2W 5%	3
1	1006750-66	RESISTOR, 5.1K 1/4W 5%	2
1	1006750-45	RESISTOR, 680Ω 1/4 5%	1

LIST OF MATERIALS

NOTE:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. WHEN THE SYMBOL IS DRAWN, THE APPROPRIATE LETTER FROM THE TABLE MUST BE ENTERED AT ① ② AND ③ IN THE SYMBOL
3. FOR R1 SEE FIND NO. 1
4. FOR R2 SEE FIND NO. 2
5. FOR R3 SEE FIND NO. 3
6. FOR DIODES CR1, CR2, CR3, SEE FIND NO 4
7. FOR TRANSISTOR SEE FIND NO 5
8. FOR COIL SEE TABLE ABOVE
9. THERMAL ENVIRONMENT CRITICAL



NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN R. CHIN DATE 7/9/62
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Percy K Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC

H CURRENT DRIVER CIRCUIT

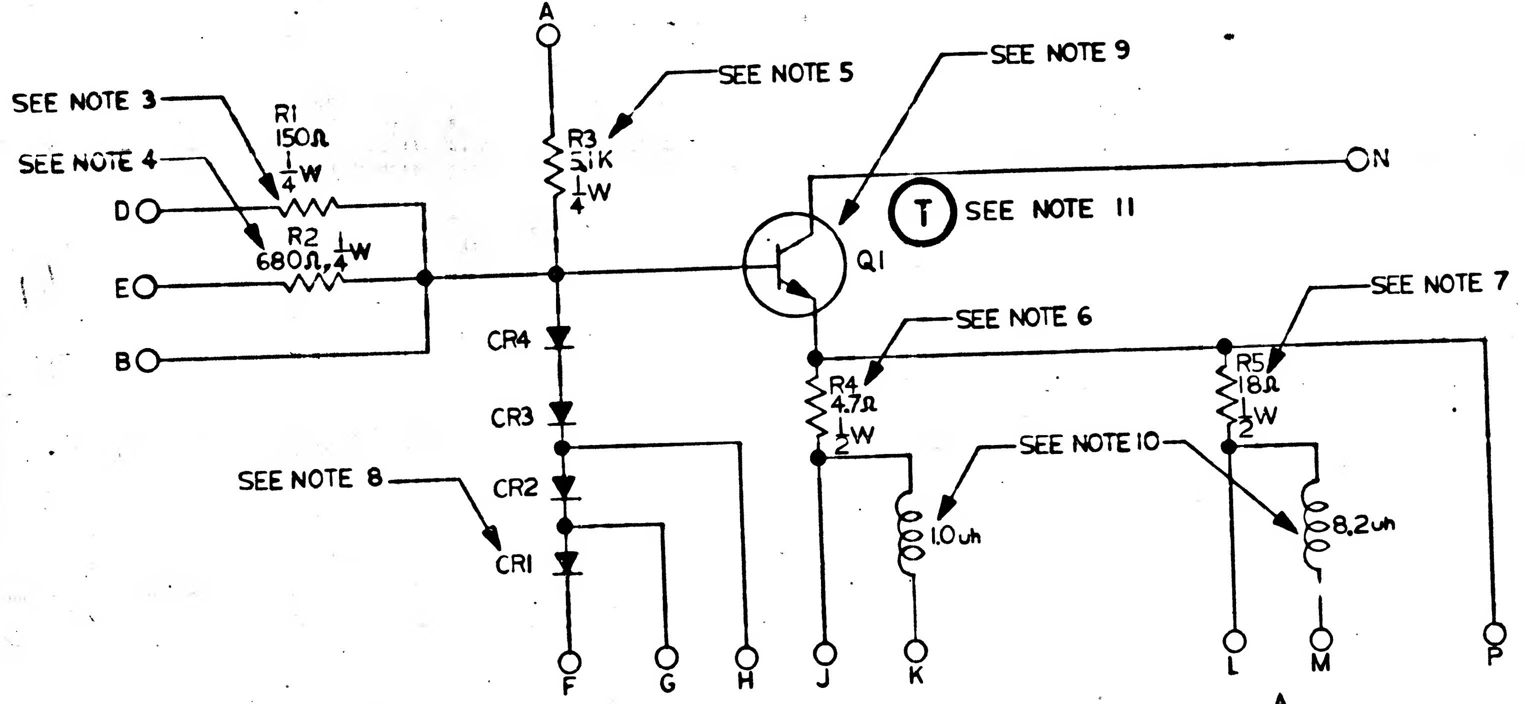
CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1006008
SCALE — | WT — | SHEET OF

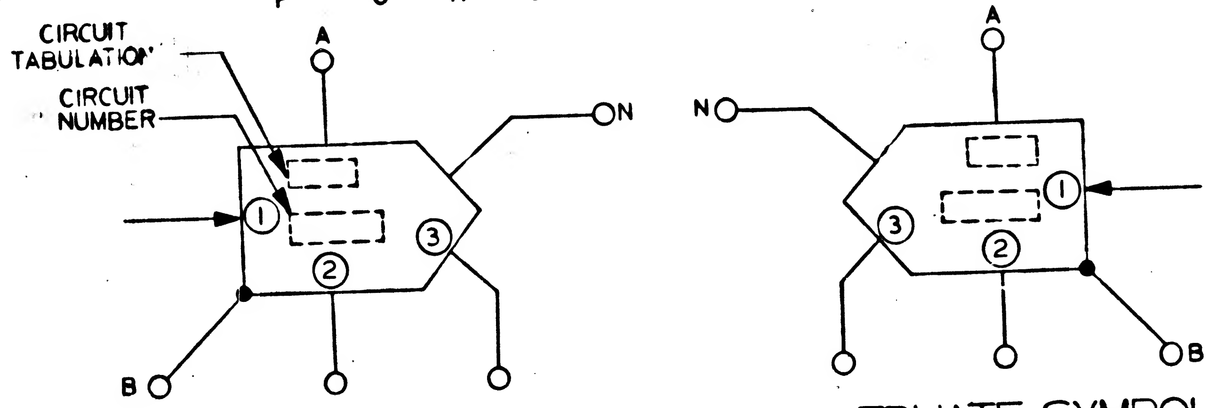
8009001

SYM	DESCRIPTION	DATE	APPROVAL

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

CIRCUIT TYPE	CURRENT (ma)	CONNECTION 1	CONNECTION 2	CONNECTION 3
HA	40	E	H	L
HB	80	E	G	L
HC	120	E	H	J
HD	240	D	G	J
HE	400	D	F	J
HF	SPECIAL	—		P
HG	40	E	H	M
HH	80	E	G	M
HJ	120	E	H	K
HK	240	D	G	K





ALTERNATE SYMBOL ORIENTATION

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00001 DATE 7-13-62

REFERENCE:
1. MECHANICAL ASSEMBLY DRAWING 1003010
2. TEST IN ACCORDANCE WITH TEST SPEC. ATP 1003010

PARTS LISTS FOR ENGINEERING REF. ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006756-2	COIL (8.2uh)	9
1	1006756-3	COIL (1.0 uh)	8
1	1006759	TRANSISTOR, NPN, MEDIUM POWER	7
4	1006751	DIODE SILICON LOGIC	6
1	1006760-7	RESISTOR, 18Ω 1/2W 5%	5
1	1006760-154	RESISTOR, 47Ω 1/2W 5%	4
1	1006750-66	RESISTOR, 5.1K 1/4W 5%	3
1	1006750-45	RESISTOR, 680Ω 1/4W 5%	2
1	1006750-29	RESISTOR, 150Ω 1 4W 5%	1

LIST OF MATERIALS

NOTE:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. WHEN THE SYMBOL IS DRAWN, THE APPROPRIATE LETTER FROM THE TABLE MUST BE ENTERED AT ①②AND③ IN THE SYMBOL
3. FOR R1 SEE FIND NO.1
4. FOR R2 SEE FIND NO.2
5. FOR R3 SEE FIND NO.3
6. FOR R4 SEE FIND NO.4
7. FOR R5 SEE FIND NO.5
8. FOR DIODES CR1, CR2, CR3, CR4, SEE FIND NO.6
9. FOR TRANSISTOR SEE FIND NO.7
10. FOR COIL SEE FIND NO.8 & 9
11. THERMAL ENVIRONMENT CRITICAL

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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CAMBRIDGE, MASS.
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DRAWN R. CHIN DATE 7/9/62
CHECKED Joe Matos
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Percy K Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
H CURRENT DRIVER CIRCUIT

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1006008
SCALE — | WT — | SHEET OF

1006008

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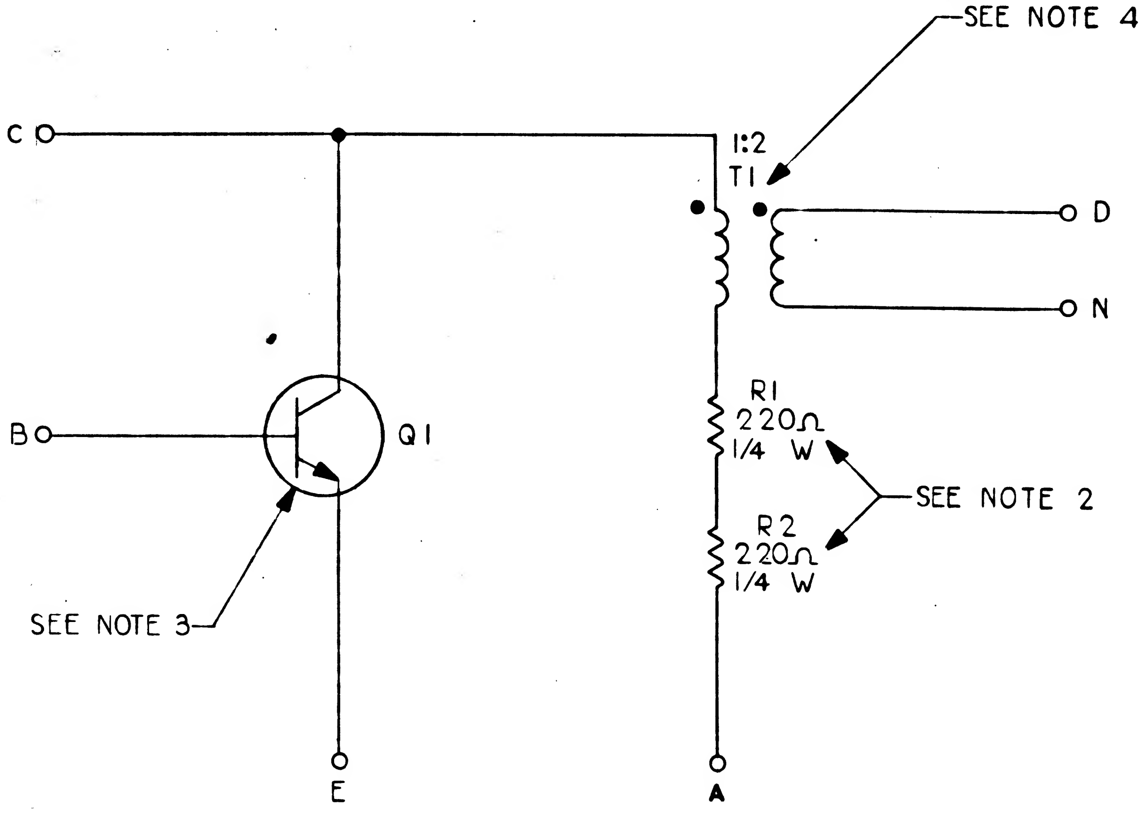
B 6009001 (M)

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW — CHANGED RESISTORS TO 1/4 W	7-20-62	7/23/62
(M) B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	



NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 AND R2 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
2	1006750-33	RESISTOR, 1/4 W 220Ω 5%	1

LIST OF MATERIALS

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN MAHONEY DATE 7/9/62
CHECKED Joe Martin
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Perry K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE —
WT —
SHEET 1 OF 1

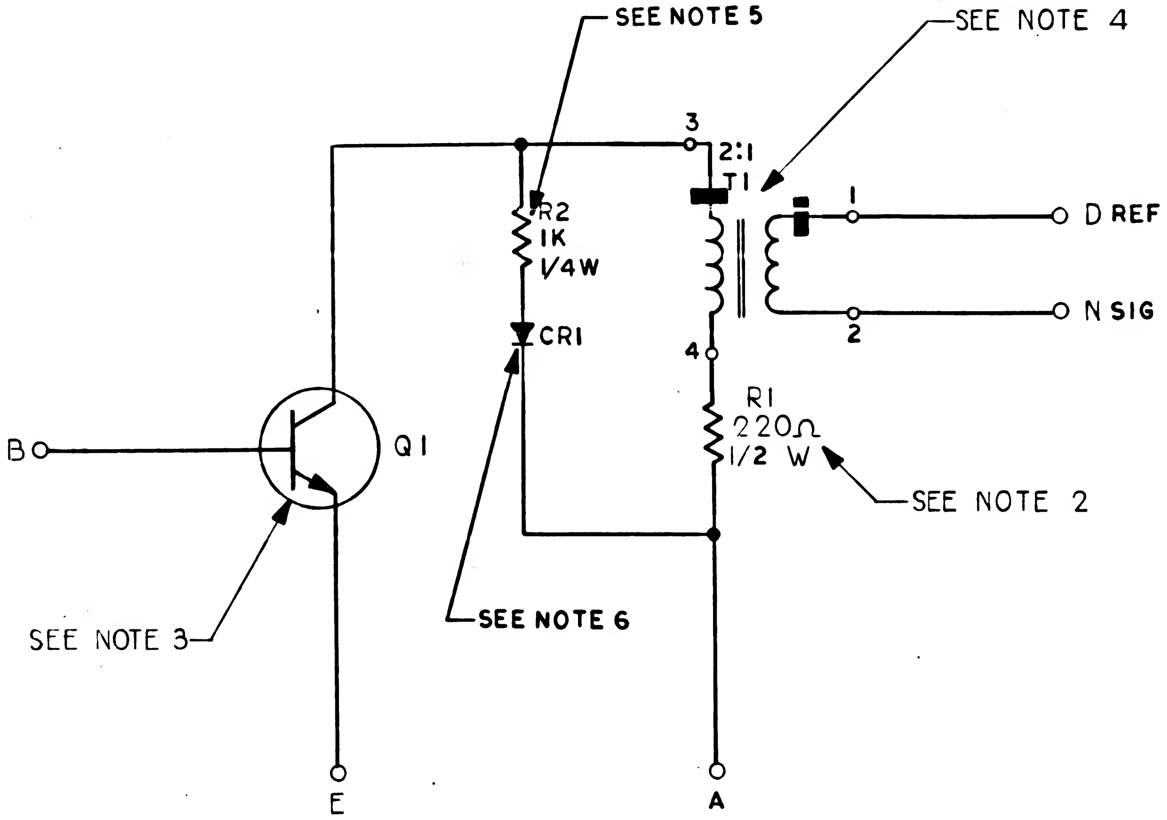
1006009 B

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

C 6009001 Ⓜ

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW —— CHANGED RESISTORS TO 1/4 W	7-20-62	DD 7/23/62
Ⓜ B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	ECN WLK.
C	REVISED PER TDRR 00560	3·13·63	ECN WK.



NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3
5-FOR R2 SEE FIND NO. 4
6-FOR CR1 SEE FIND NO. 5

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006751	DIODE	5
1	1006750-32	RESISTOR, 1/4 W 1K	4
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
2	1006760-16	RESISTOR, 1/2 W 220Ω	1

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN MAHONEY DATE 7/9/62
CHECKED Joe Marton
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Percy K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE — WT — SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

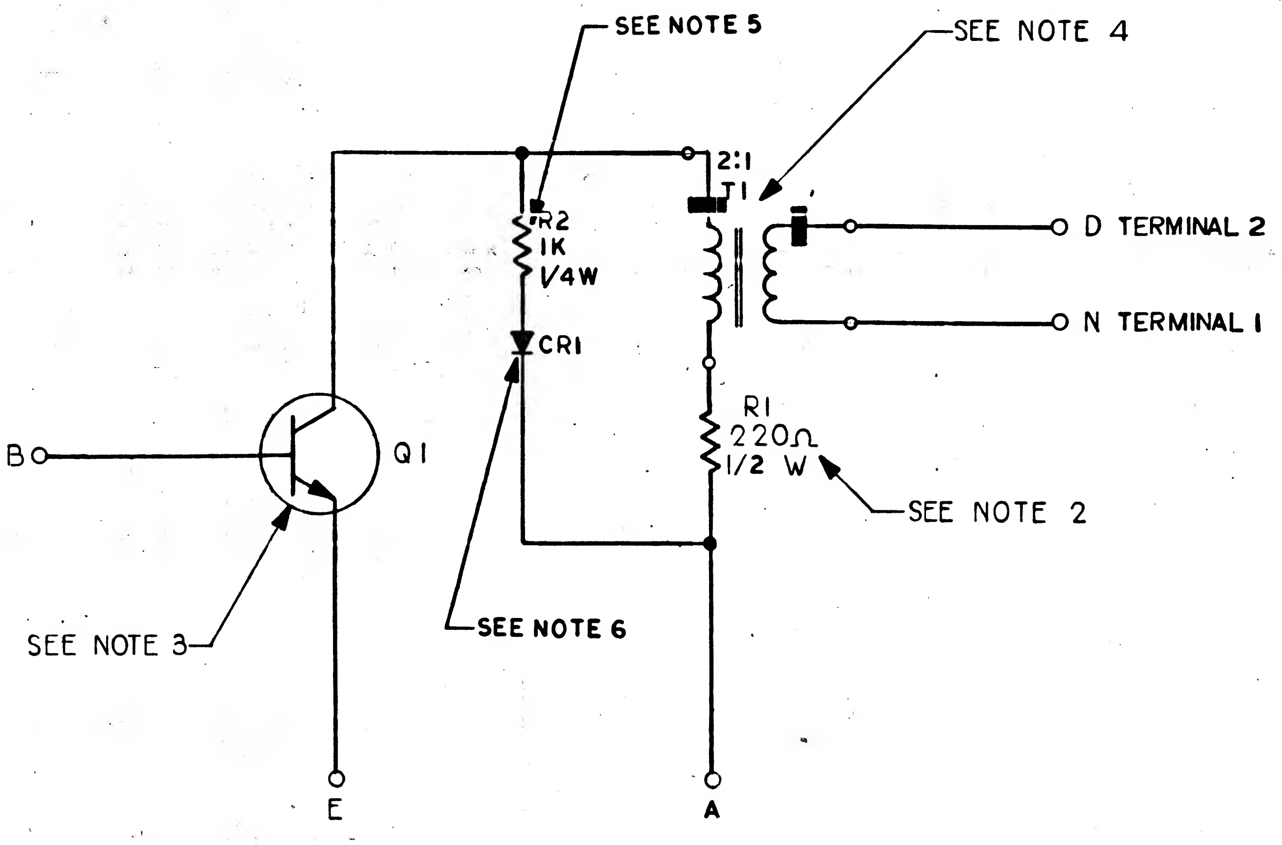
C 6009001

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

D 6009001 Ⓜ

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW —— CHANGED RESISTORS TO 1/4 W	7-20-62	D.D. 7/23/62
Ⓜ B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	ECH WAK.
Ⓜ C	REVISED PER TDRR 00560	3-13-63	ECH WK.
D	REVISED PER TDRR 01747	6/26/63	ECH WR.



NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3
5-FOR R2 SEE FIND NO. 4
6-FOR CR1 SEE FIND NO. 5

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006751	DIODE	5
1	1006750-32	RESISTOR, 1/4 W 1K	4
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
2	1006760-16	RESISTOR, 1/2 W 220Ω	1

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN MAHONEY DATE 7/9/62
CHECKED Joe Martin
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Perry K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE —
WT —
SHEET 1 OF 1

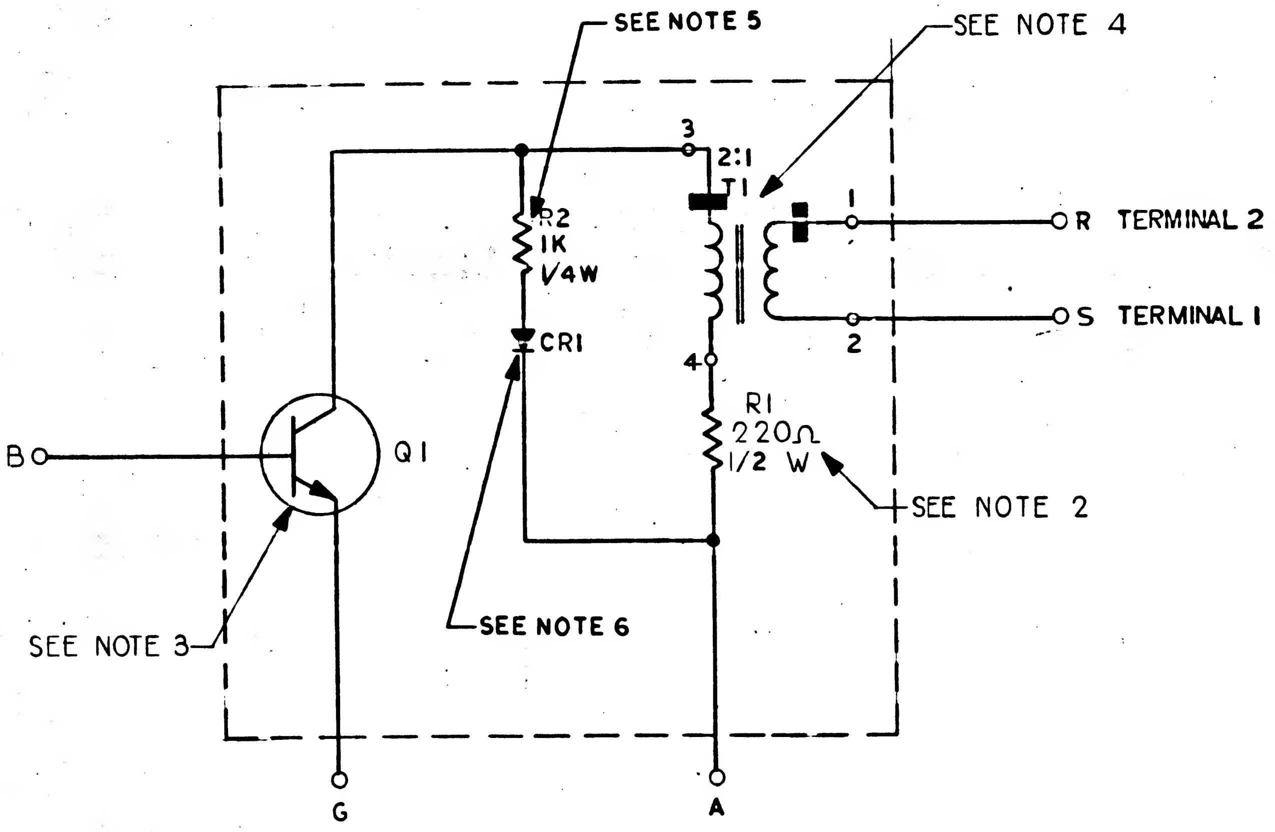
INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

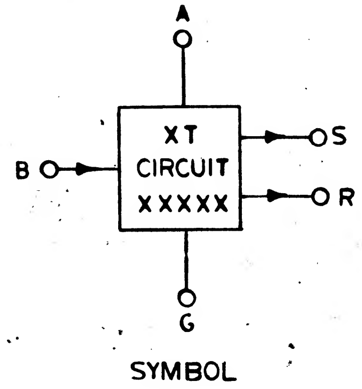
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

E 6009001 Ⓜ

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW —— CHANGED RESISTORS TO 1/4 W	7-20-62	7/23/62
Ⓜ B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	ECH WLK.
Ⓜ C	REVISED PER TDRR 00560	3-13-63	ECH WK
Ⓜ D	REVISED PER TDRR 01747	6/26/63	ECH WR.
E	REVISED PER TDRR 02054	7/17/6	RPK





SYMBOL

NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3
5-FOR R2 SEE FIND NO. 4
6-FOR CR1 SEE FIND NO. 5

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006751	DIODE	5
1	1006750-32	RESISTOR, 1/4 W 1K	4
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
2	1006760-16	RESISTOR, 1/2 W 220Ω	1

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN MAHONEY DATE 7/9/62
CHECKED Joe Martin
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Perry K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

CODE IDENT NO. | SIZE C | NASA DRAWING NO. 1006009
SCALE — | WT — | SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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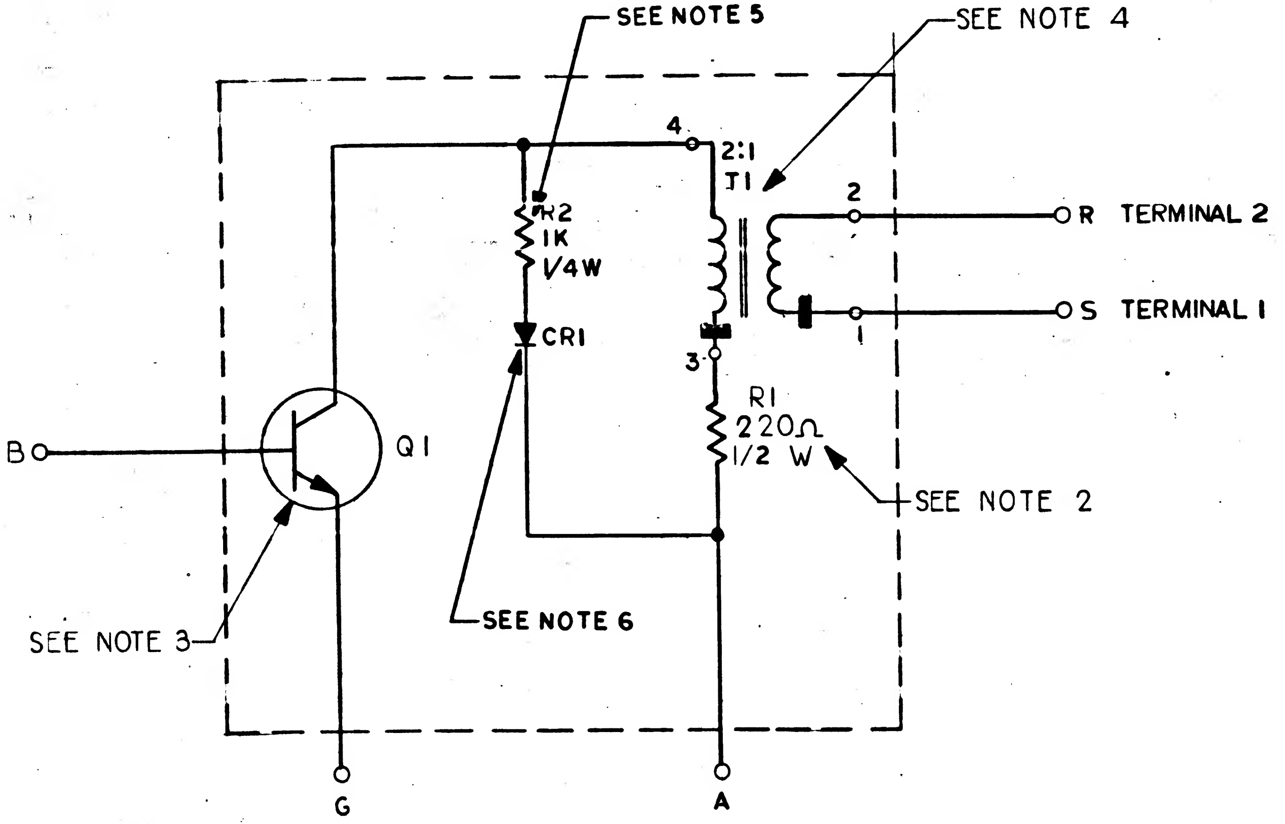
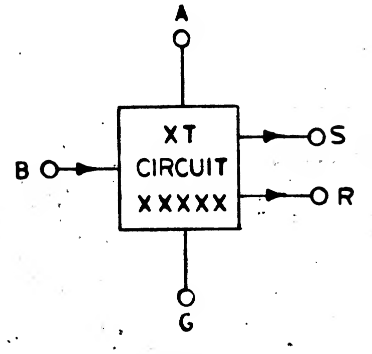
1006009 F

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW —— CHANGED RESISTORS TO 1/4 W	7-20-62	7/23/62
B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	ECN WLK.
C	REVISED PER TDRR 00560	3-13-63	ECN WK.
D	REVISED PER TDRR 01747	6/26/63	ECN WK.
E	REVISED PER TDRR 02054	7/17/63	RFK
F	REVISED PER TDRR 03042	10/29/63	RFK WK





SYMBOL

NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3
5-FOR R2 SEE FIND NO. 4
6-FOR CR1 SEE FIND NO. 5

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006751	DIODE	5
1	1006750-32	RESISTOR, 1/4 W 1K	4
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
1	1006760-16	RESISTOR, 1/2 W 220Ω	1

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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DWG. NO. CONTRACT
DRAWN MAHONEY DATE 7/9/62
CHECKED Joe Marton
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Perry K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE —
WT —
SHEET 1 OF 1

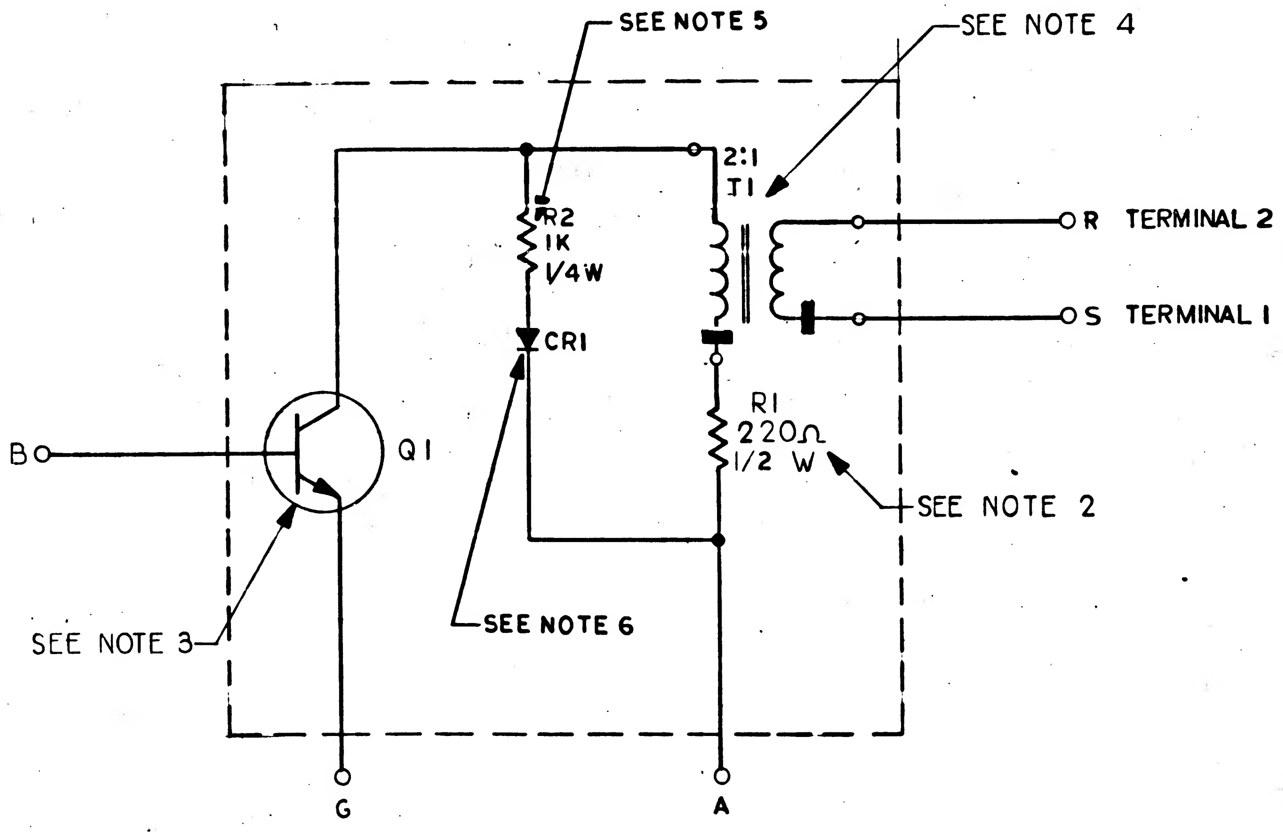
INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

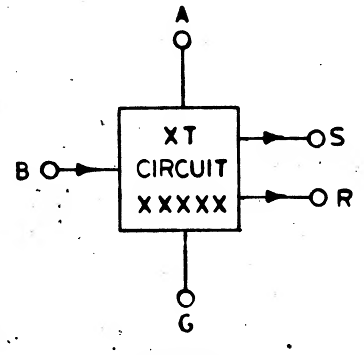
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

G 6009001

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW — CHANGED RESISTORS TO 1/4 W	7-20-62	DD 7/23/62
B	REVISED AND RELEASED CLASS A PER TDRR 00082	10-29-62	EOH WKK.
C	REVISED PER TDRR 00560	3-13-63	ECH WK
D	REVISED PER TDRR 01747	6/26/63	EOH WK.
E	REVISED PER TDRR 02054	7/17/63	RPK
F	REVISED PER TDRR 03042	10/2/63	EPL WK
G	REVISED PER TDRR 04014	10-17-63	EPL WK





SYMBOL

NOTES-
1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3
5-FOR R2 SEE FIND NO. 4
6-FOR CR1 SEE FIND NO. 5

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006751	DIODE	5
1	1006750-32	RESISTOR, 1/4 W 1K	4
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
1	1006760-16	RESISTOR, 1/2 W 220Ω	1

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —#— DECIMALS ± —#— ANGLES ± —#—
DO NOT SCALE THIS DRAWING
MATERIAL —#—
HEAT TREATMENT —#—
FINAL FINISH —#—

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INSTRUMENTATION LAB
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DWG. NO. CONTRACT
DRAWN MAHONEY DATE 7/9/62
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APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL Jack Barnard
MIT APPROVAL Percy K. Bryant

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER
OUTPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE —#— WT —#— SHEET 1 OF 1

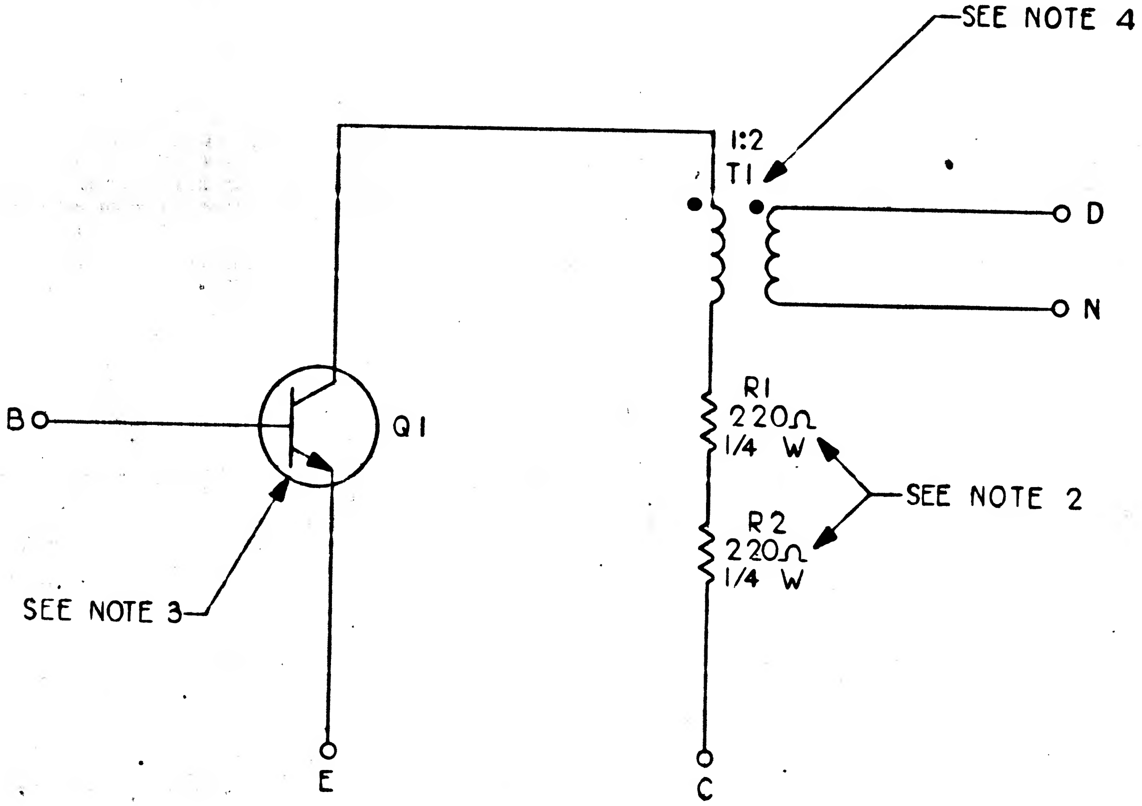
INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

A 6009001

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED DIRECTION OF EMITTER ARROW — CHANGED RESISTORS TO 1/4 W	7-20-62	DD 7/23/62



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00001 **DATE** 7-13-62

NOTES-

1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2-FOR R1 AND R2 SEE FIND NO. 1
3-FOR Q1 SEE FIND NO. 2
4-FOR T1 SEE FIND NO. 3

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006762	TRANSFORMER, PULSE	3
1	1006752	TRANSISTOR, NPN, LOGIC	2
2	1006750-33	RESISTOR, 1/4 W 220Ω 5%	1

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO.
CONTRACT
DRAWN MAHONEY DATE 7/9/62
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
XT TRANSFORMER OUTPUT CIRCUIT

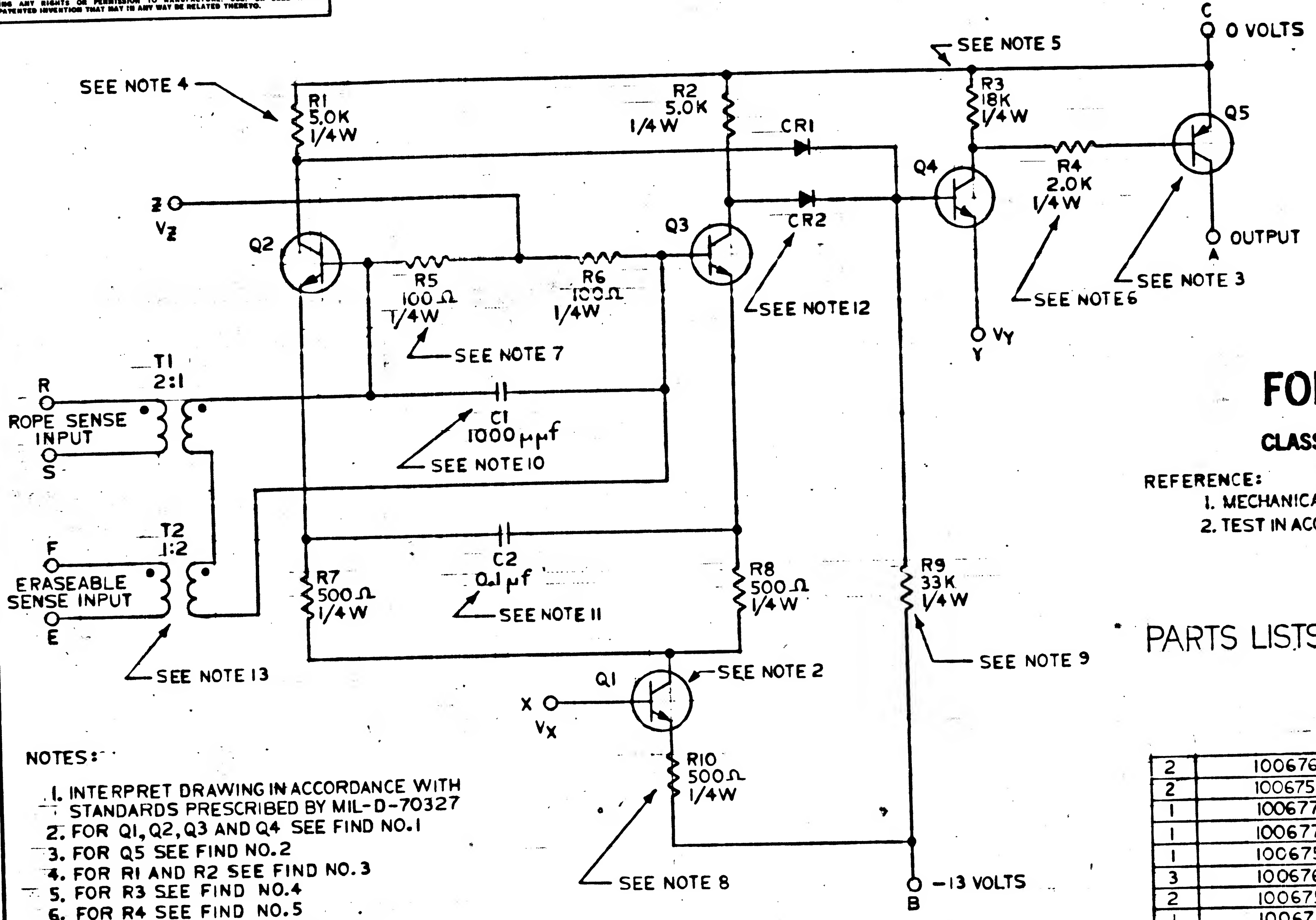
CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006009
SCALE —
WT —
SHEET OF

6009001 A

1109001

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00002 DATE 7-19-62

REFERENCE:
1. MECHANICAL ASSEMBLY DWG. 1003013
2. TEST IN ACCORDANCE WITH TEST SPEC. ATP 1003013

PARTS LISTS FOR ENGINEERING REF. ONLY

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. FOR Q1, Q2, Q3 AND Q4 SEE FIND NO. 1
3. FOR Q5 SEE FIND NO. 2
4. FOR R1 AND R2 SEE FIND NO. 3
5. FOR R3 SEE FIND NO. 4
6. FOR R4 SEE FIND NO. 5
7. FOR R5 AND R6 SEE FIND NO. 6
8. FOR R7, R8, AND R10 SEE FIND NO. 7
9. FOR R9 SEE FIND NO. 8
10. FOR C1 SEE FIND NO. 9
11. FOR C2 SEE FIND NO. 10
12. FOR CR1 AND CR2 SEE FIND NO. 11
13. FOR T1 AND T2 SEE FIND NO. 12
14. V_X, V_Y, V_Z SUPPLIED FROM TYPE SE CIRCUIT REF. DWG. NO. 1006016

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
2	1006762	TRANSFORMER, PULSE	12
2	1006751	DIODE, SILICON LOGIC	11
1	1006774	CAPACITOR 0.1 μf	10
1	1006775	CAPACITOR 1000 μμf	9
1	1006750-85	RESISTOR 33K 1/4W 5%	8
3	1006769-	RESISTOR 500Ω 1/4W 1%	7
2	1006750-25	RESISTOR 100Ω 1/4W 5%	6
1	1006750-56	RESISTOR 2.0K 1/4W 5%	5
1	1006750-79	RESISTOR 18K 1/4W 5%	4
2	1006769-	RESISTOR 5.0K 1/4W 1%	3
1	1006753	TRANSISTOR PNP, LOGIC	2
4	1006752	TRANSISTOR NPN, LOGIC	1

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
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DWG. NO. CONTRACT
DRAWN W. HORGAN DATE 7-19-62
CHECKED Joe Maton
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL R. Ragan

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
SENSE AMPLIFIER CIRCUIT
TYPE SA

CODE IDENT NO. SIZE C NASA DRAWING NO. 1006011
SCALE — WT — SHEET OF

1006013

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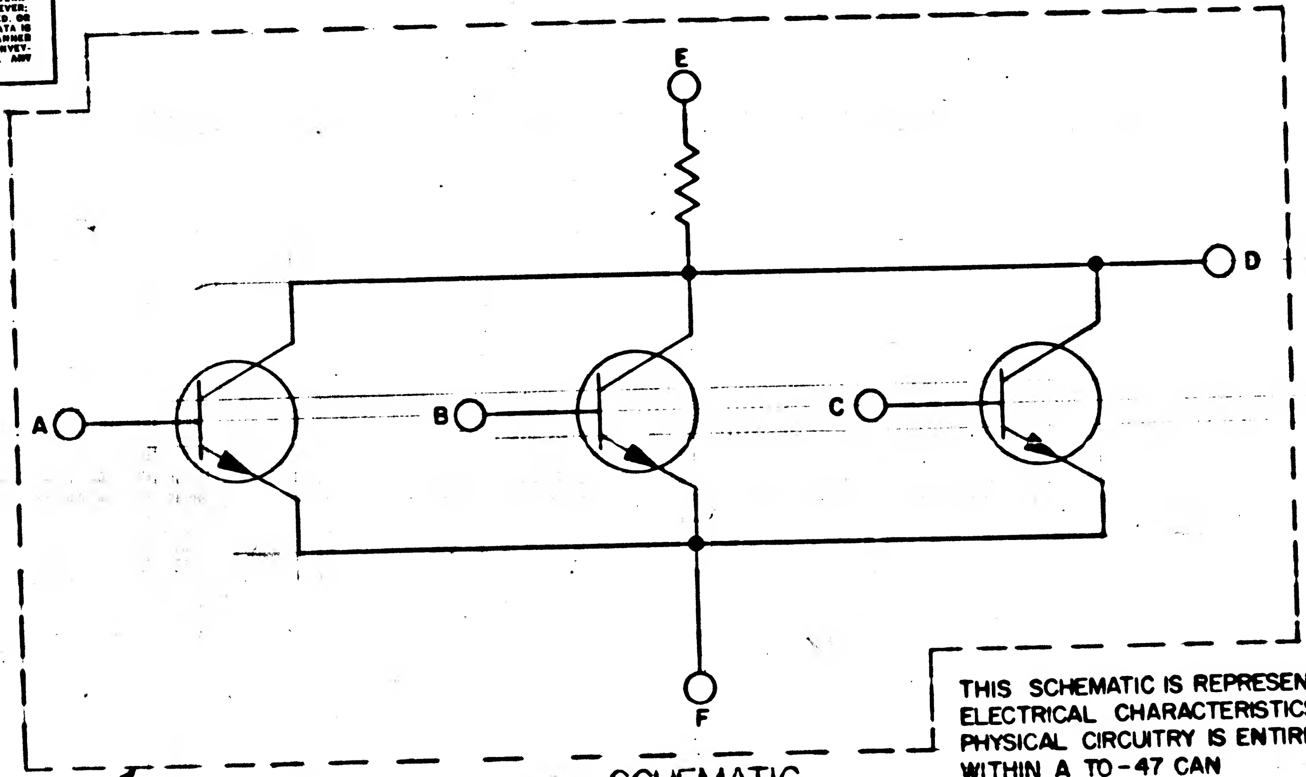
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

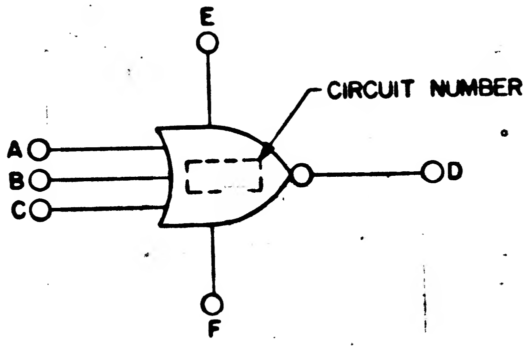


THIS SCHEMATIC IS REPRESENTATIVE OF THE ELECTRICAL CHARACTERISTICS ONLY. THE PHYSICAL CIRCUITRY IS ENTIRELY CONTAINED WITHIN A TO-47 CAN

SCHEMATIC

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00002 DATE 7-19-62



SYMBOL

REFERENCE:
1. MECHANICAL ASSEMBLY DWG 1003015
2. TEST IN ACCORDANCE WITH TEST SPEC ATP 1003015

NOTE
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. FOR MICROLOGIC GATE SEE FIND NO 1

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1006771	MICROLOGIC GATE (TO-47 SIZE)	1

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± // DECIMALS ± // ANGLES ± //
DO NOT SCALE THIS DRAWING
MATERIAL //
HEAT TREATMENT //
FINAL FINISH //

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN PLACHOWICZ DATE 7-18-62
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
MICROLOGIC GATE
MG CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006013
SCALE NONE
WT
SHEET 1 OF 1

1006013

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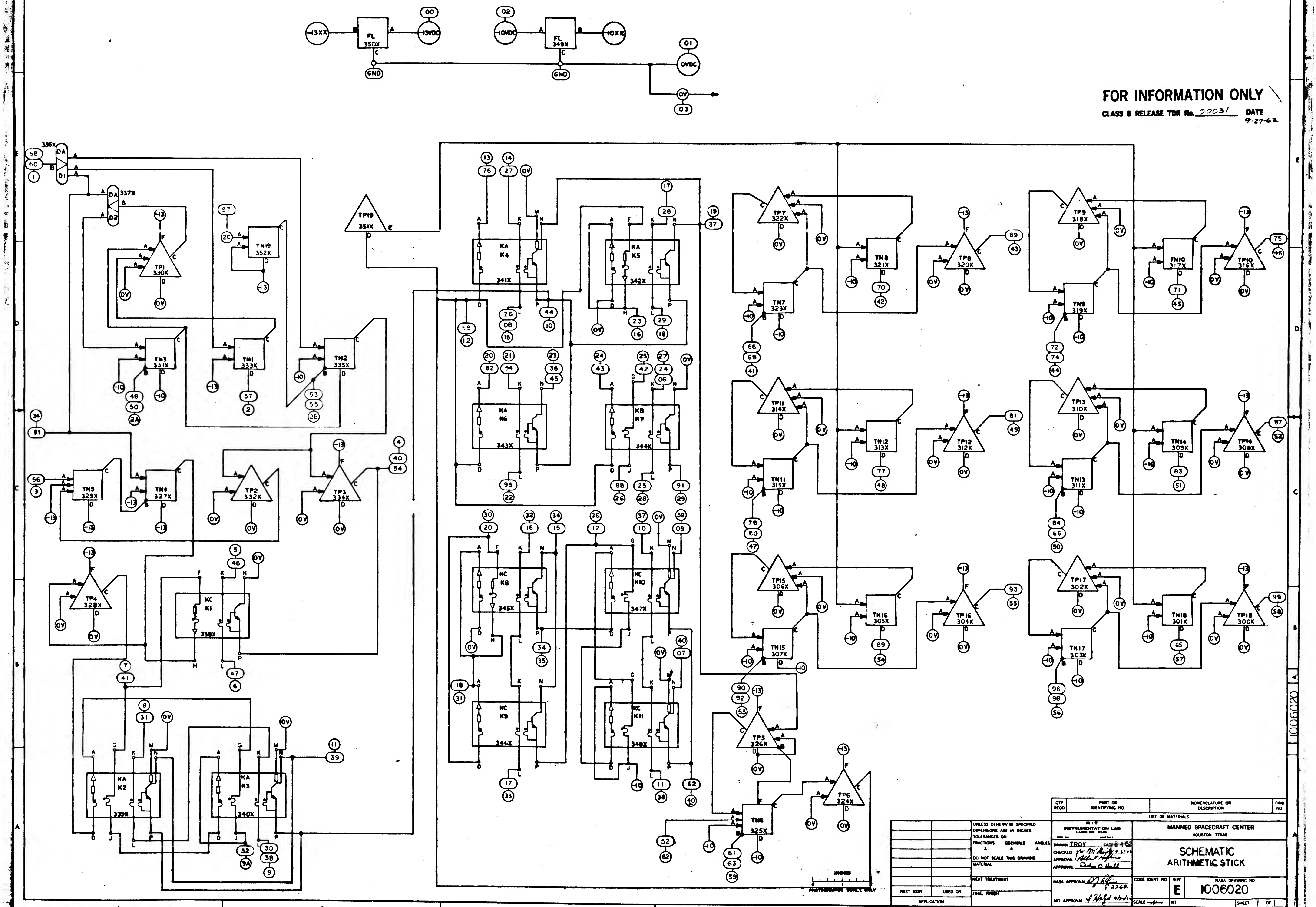
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A1	INPUT AND OUTPUT OF TP19 REVERSED	9-27-62	
A2	TN 6-SIGNAL 62 WAS: (13), IS: (32)	TDRR # 00049	10/4/62



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00031 DATE 9-27-62

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO
CONTRACT

DRAWN TROY DATE 8-4-62
CHECKED W McNulty 9-27-62
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL D J Kline 9-27-62
MIT APPROVAL 9/30/62

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ARITHMETIC STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006020
SCALE —
WT
SHEET 1 OF 1

1006020 A

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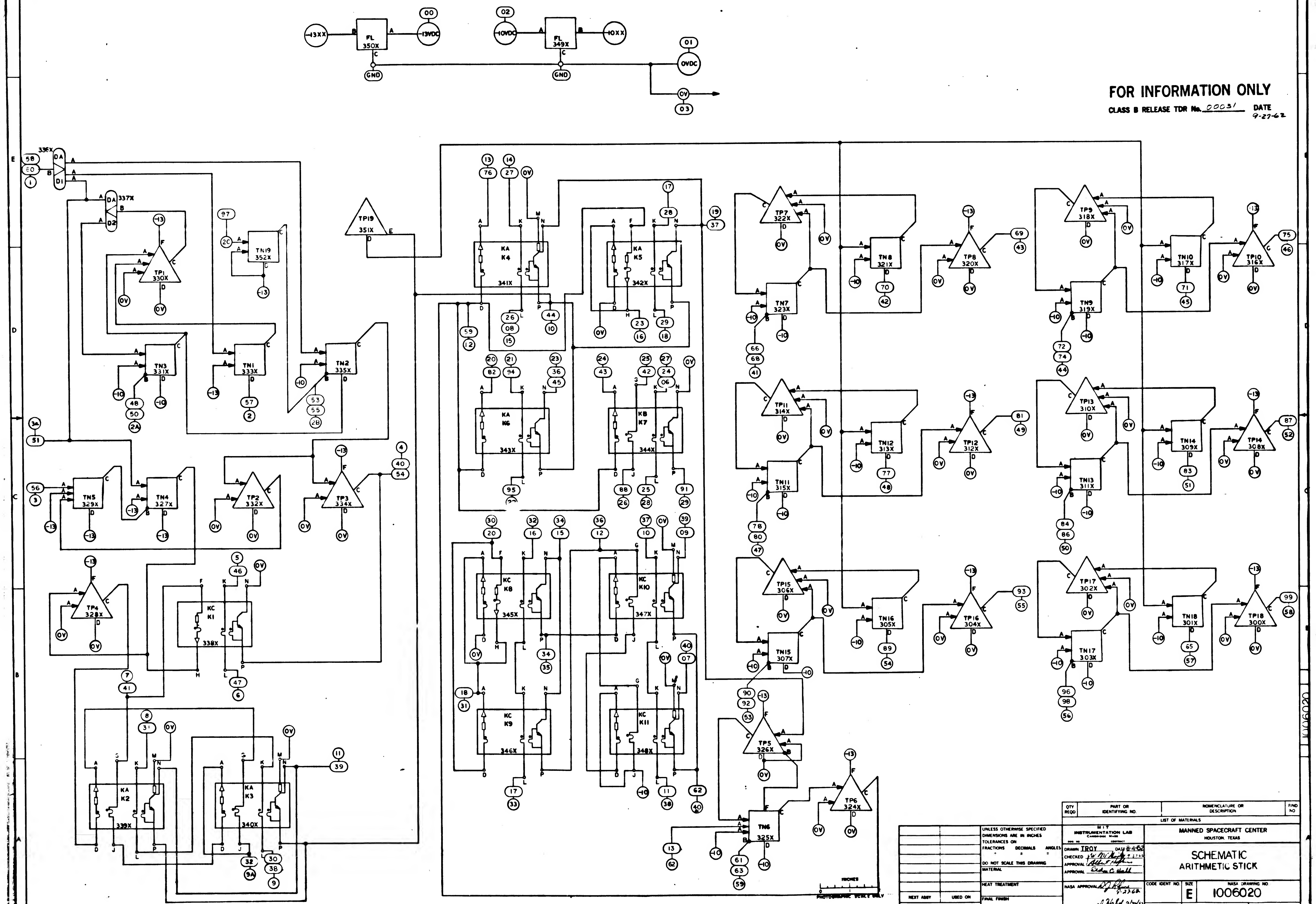
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00031 DATE 9-27-62



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN TROY DATE 8-4-62
CHECKED J W McKinley 9-27-62
APPROVAL Albert Hopkins
APPROVAL Eldon C. Hall
NASA APPROVAL 9-27-62
MIT APPROVAL 9/27/62

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HOUSTON, TEXAS

SCHEMATIC
ARITHMETIC STICK

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006020
SCALE | WT | SHEET OF

1006020

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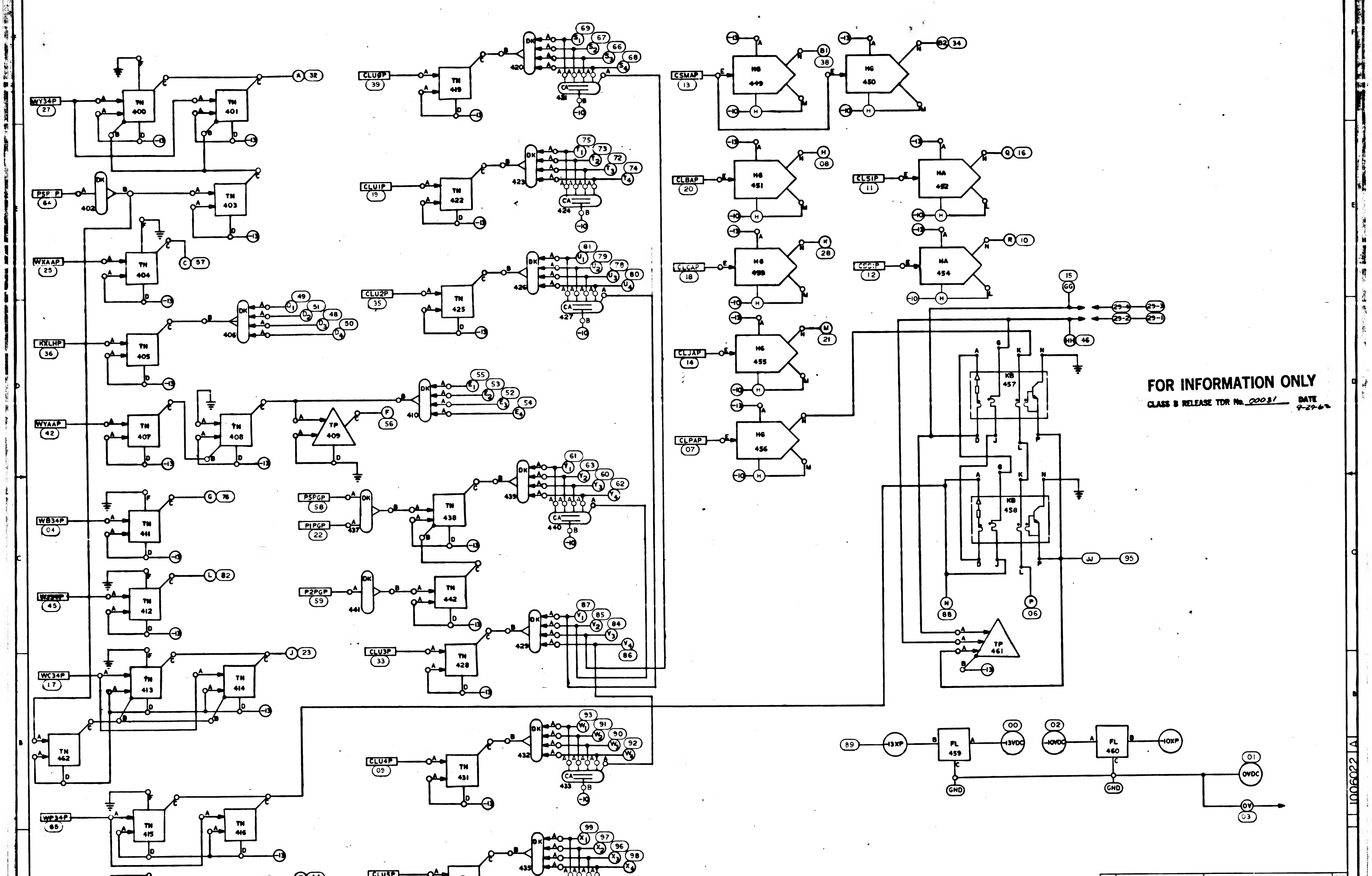
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	Ⓗ ADDED TO ALL H CIRCUITS	27-9-62	



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00031 DATE 9-27-62

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN TROY DATE 8-14-62
CHECKED J. McNabb 9-27-62
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall
NASA APPROVAL W. J. Rhine 9-27-62
MIT APPROVAL D Hanley 9/27/62

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ARITHMETIC PULSE STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO. 1006022
SCALE
WT
SHEET 1 OF 2

INCHES
PHOTOGRAPHIC SCALE ONLY

1006022 A

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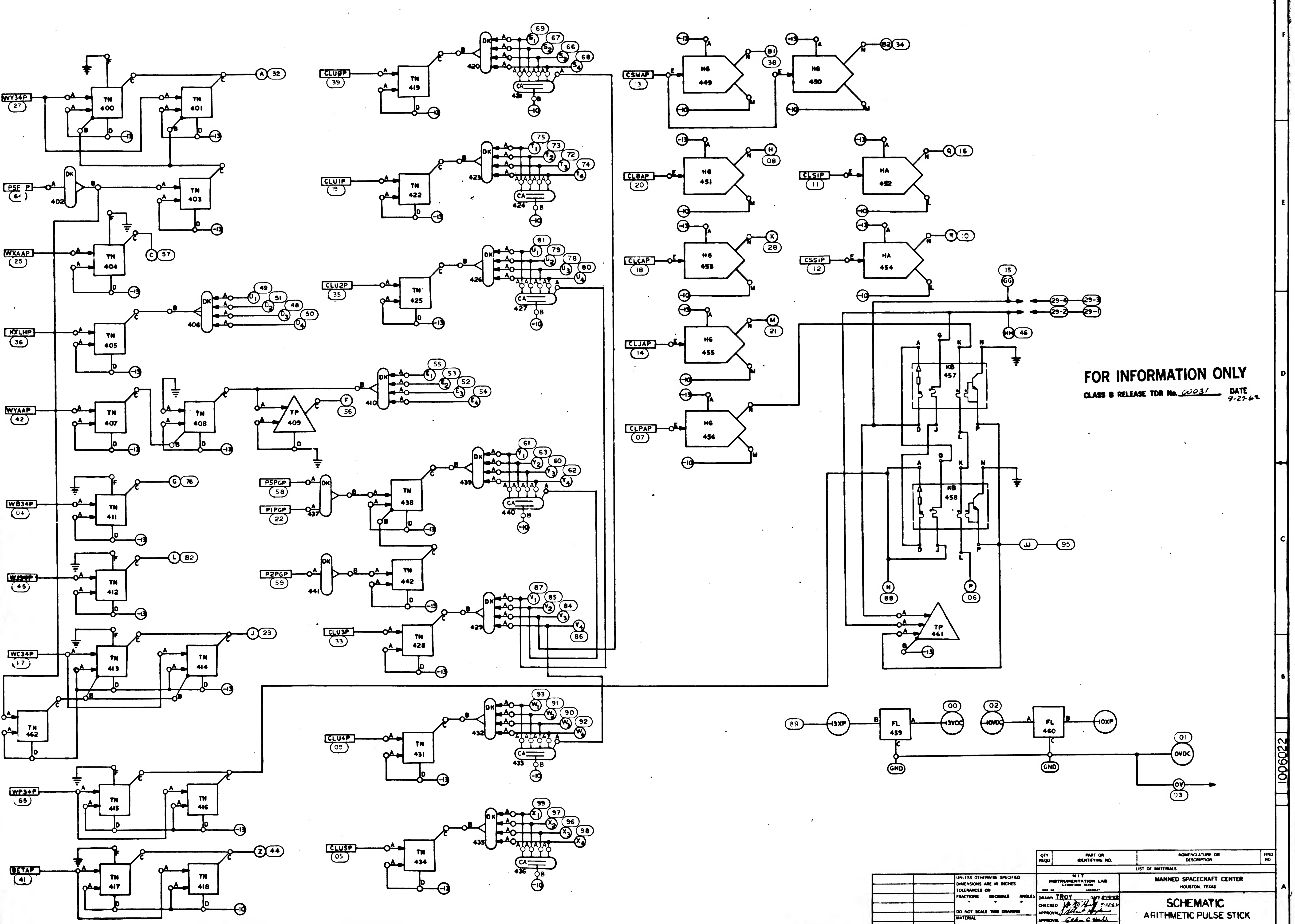
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00031 DATE 9-27-62

1006022

INCHES

PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN TROY DATE 8-14-62
CHECKED J. McHenry 9-27-62
APPROVAL Albert Hopkins
APPROVAL Eldon C. Hall
NASA APPROVAL 9-27-62
MIT APPROVAL 9/27/62

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ARITHMETIC PULSE STICK

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	E	1006022
SCALE	WT	SHEET OF

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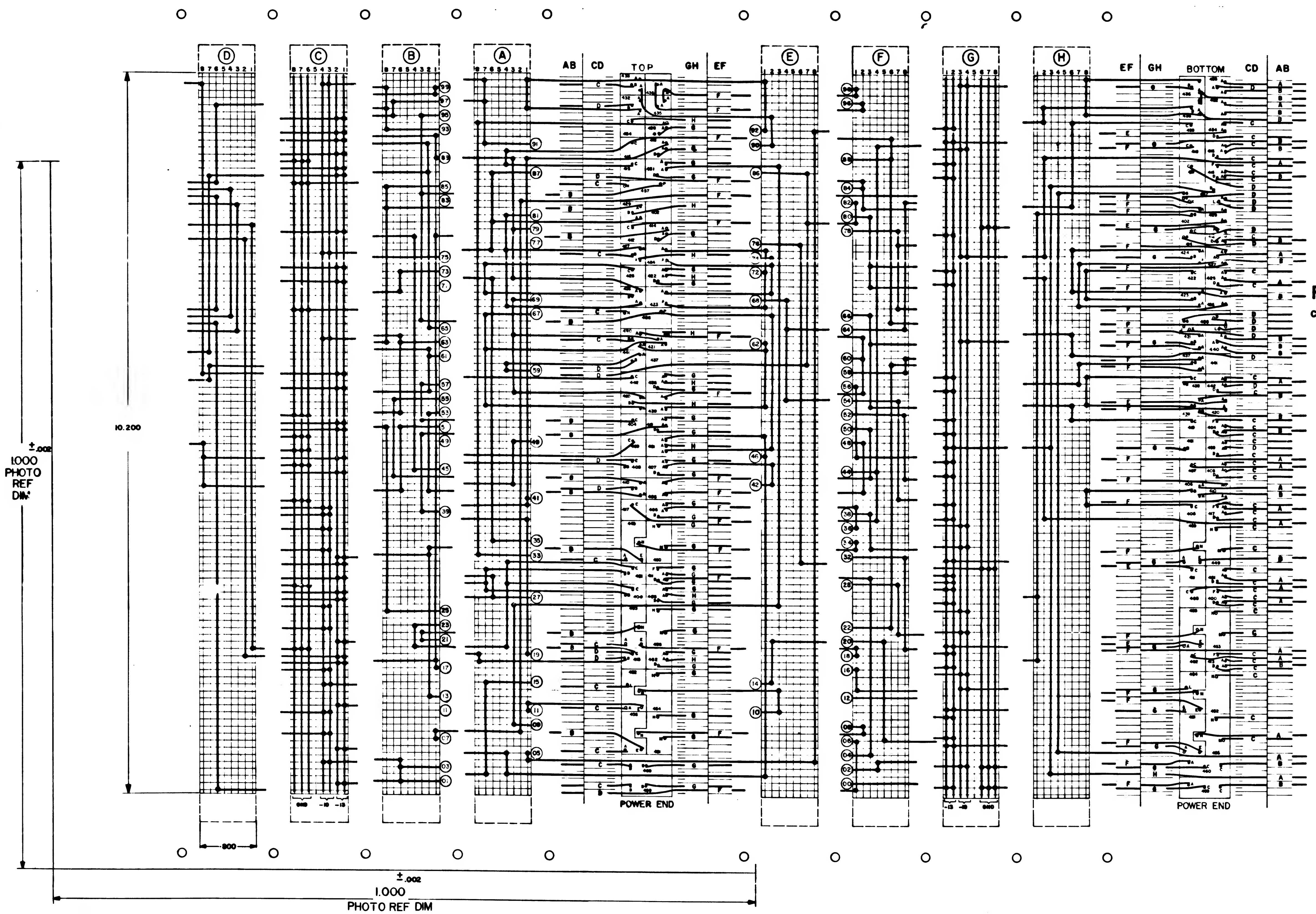
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 3050 DATE 10-4-62

NOTES -

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

2- ORIGINAL OF THIS DRAWING OR REPRODUCTION MADE BY PROCESS OR METHOD SHALL INSURE DIMENSIONAL STABILITY. DIMENSIONAL VARIATIONS SHALL NOT EXCEED .001 INCH PER INCH.

3- MAKE MASTER PATTERN POSITIVE FILMS TO DIMENSIONS SHOWN.

4- CUT TO WITHIN .010 OF TRIMLINE.

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± .005 ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
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DRAWN S. Dell'Anno DATE 9-26-62
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APPROVAL
APPROVAL
NASA APPROVAL W. J. Rhine 10-4-62
MIT APPROVAL

MANNED SPACECRAFT CENTER
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MATRIX WIRING,
ARITHMETIC PULSE STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006033
SCALE 2/1
WT —
SHEET 1 OF 1

1006033

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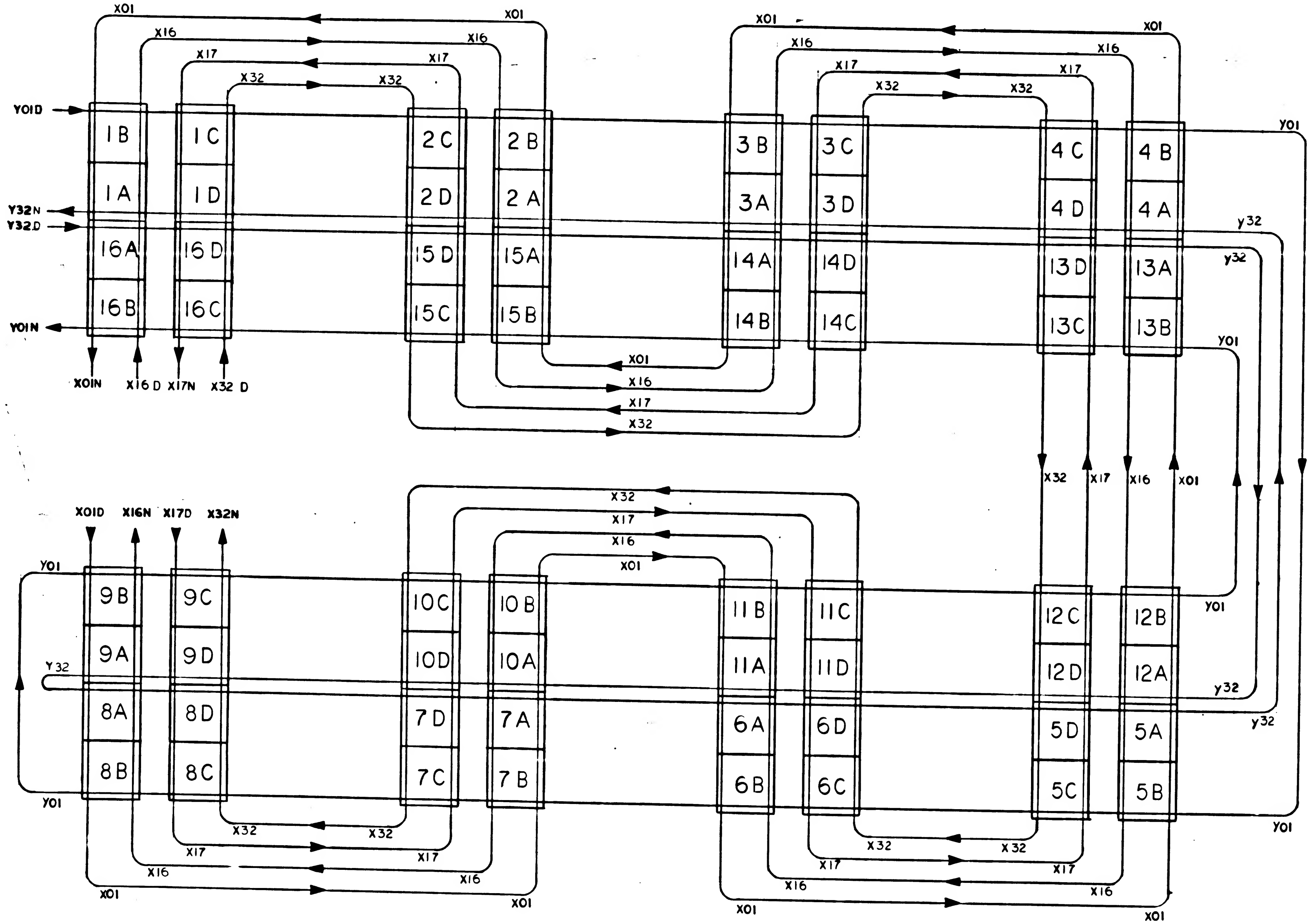
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00076 DATE 10-24-62

REFERENCE DWG:-
1. X & Y LINE INFORMATION DRAWING 1006051

NOTE
1 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN McCAFFREY DATE 7/20/62
CHECKED P. Calnet 10/23/62
APPROVAL [illegible] 10/23/62
APPROVAL Eldon C. Hall
NASA APPROVAL [illegible]
MIT APPROVAL W.A. Kupfer 10/24/62

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X & Y LINE
WIRING DIAGRAM
ERASABLE MEMORY

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006050
SCALE —//—
WT
SHEET 1 OF 1

1006050

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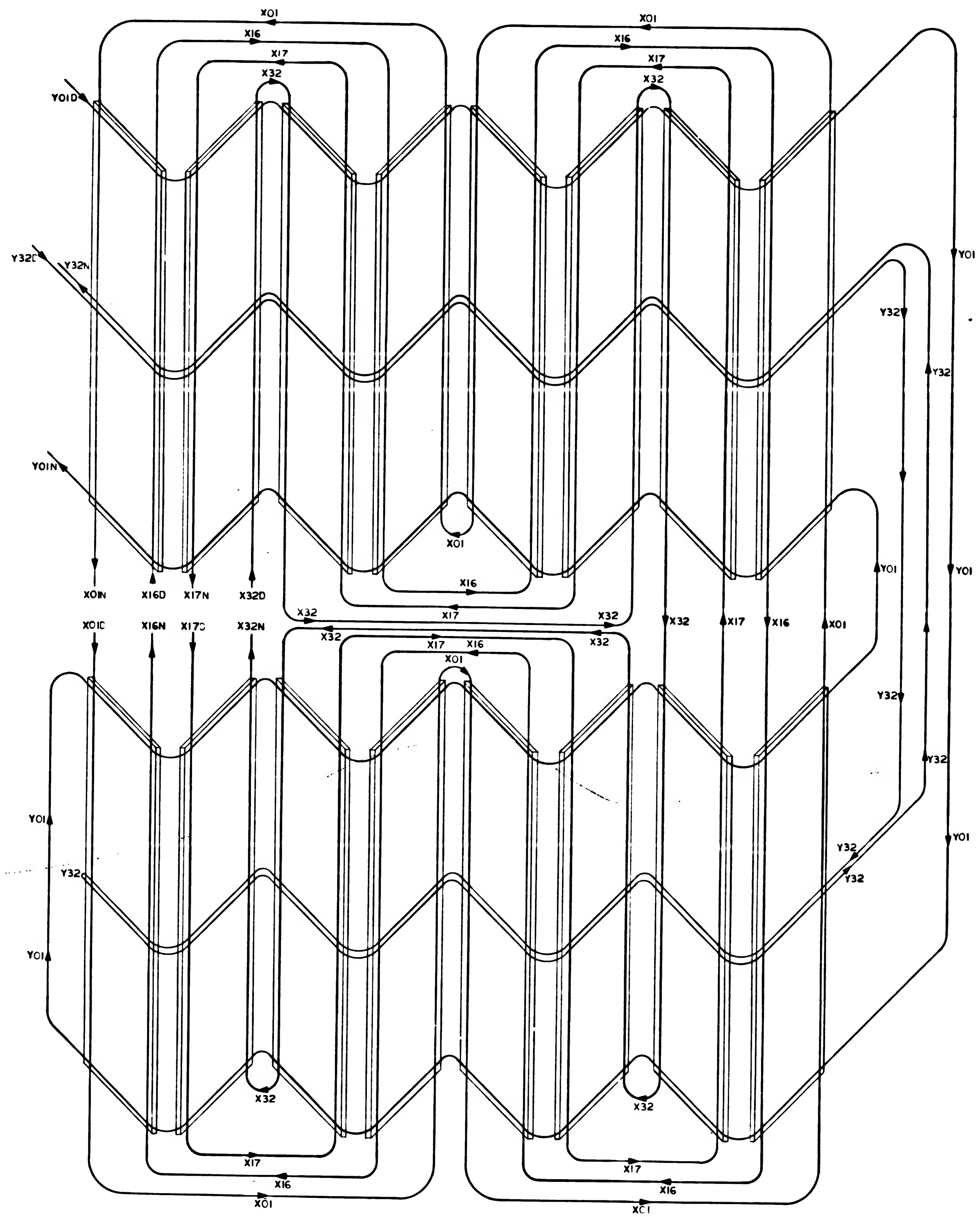
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



ISOMETRIC VIEW

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00076 DATE 10-24-62

REFERENCE DWG
1. X & Y LINE WIRING DIAGRAM 1006050

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL 10/24/62

MANNED SPACECRAFT CENTER
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X & Y LINE
INFORMATION DRAWING
ERASABLE MEMORY

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006051
SCALE
WT
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
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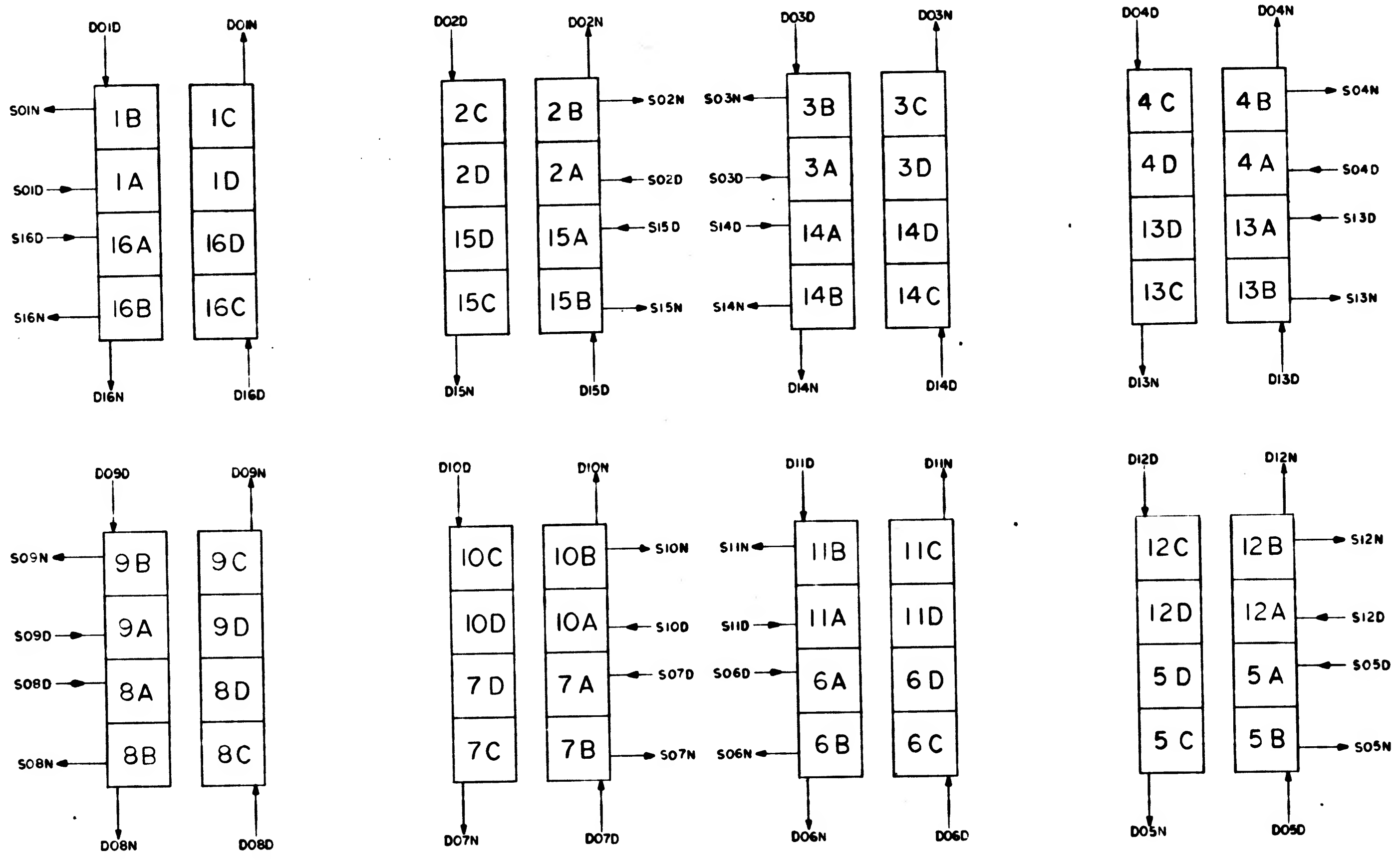


FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00076 DATE 10-24-68

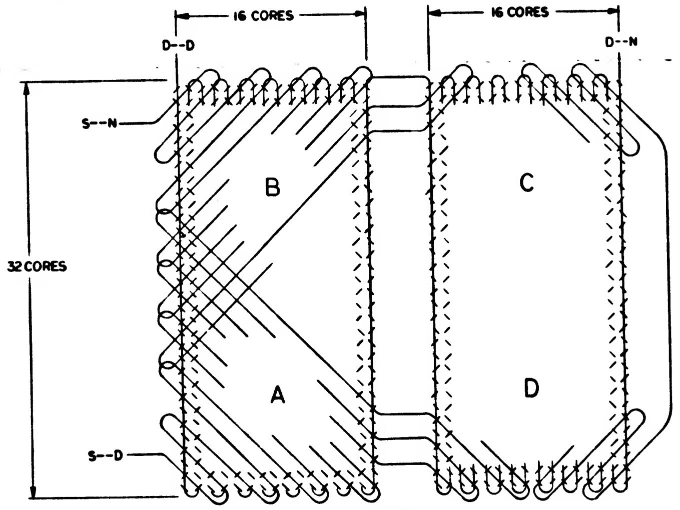


FIG. I

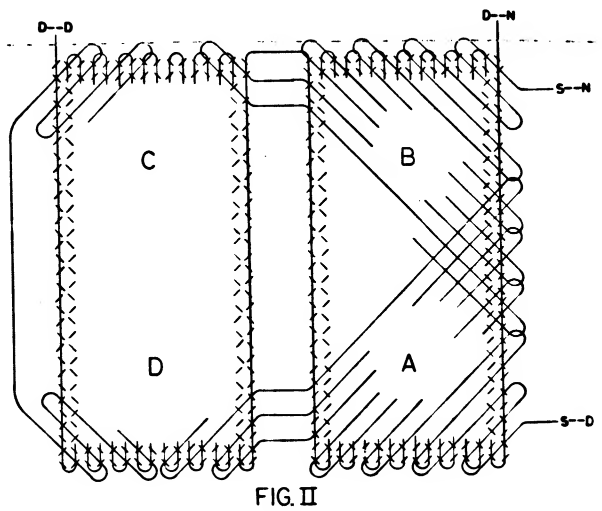
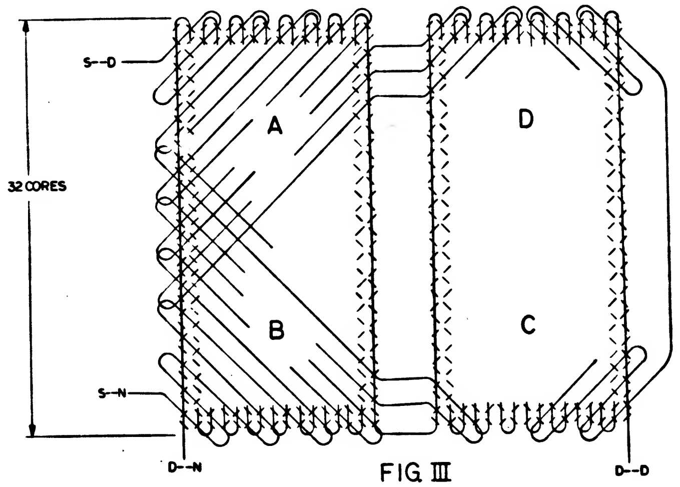
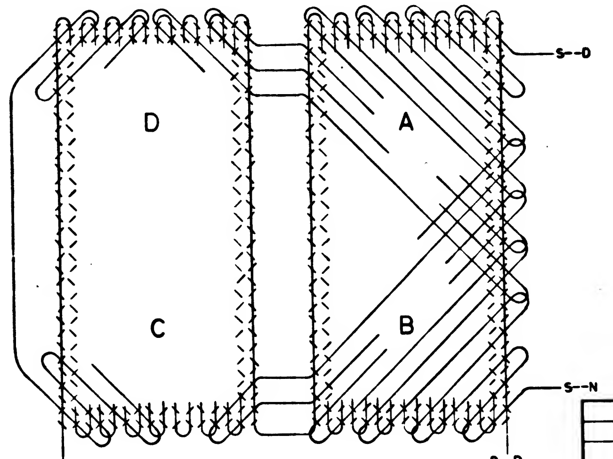


FIG. II

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. TYPICAL "SENSE" AND "DIGIT" WINDINGS FOR:
   - FIG I MATS #1, #3, #9; #11
   - FIG II MATS #2, #4, #10; #12
   - FIG III MATS #16, #14, #8; #6
   - FIG IV MATS #15, #13, #7; #5



D--N FIG. III D--D



D--N FIG. IV D--D

MASTER

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± -/- DECIMALS ± -/- ANGLES ± -/-
DO NOT SCALE THIS DRAWING
MATERIAL -/-
HEAT TREATMENT -/-
FINAL FINISH -/-

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CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN [illegible] DATE 10-5-62
CHECKED P [illegible] 10-23-62
APPROVAL [illegible] 10-26-62
APPROVAL Eldon C Hall
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 10/31/62

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SENSE AND INHIBIT WIRING
ERASABLE MEMORY

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006056
SCALE -/- | WT -/- | SHEET 1 OF 1

1006056 A

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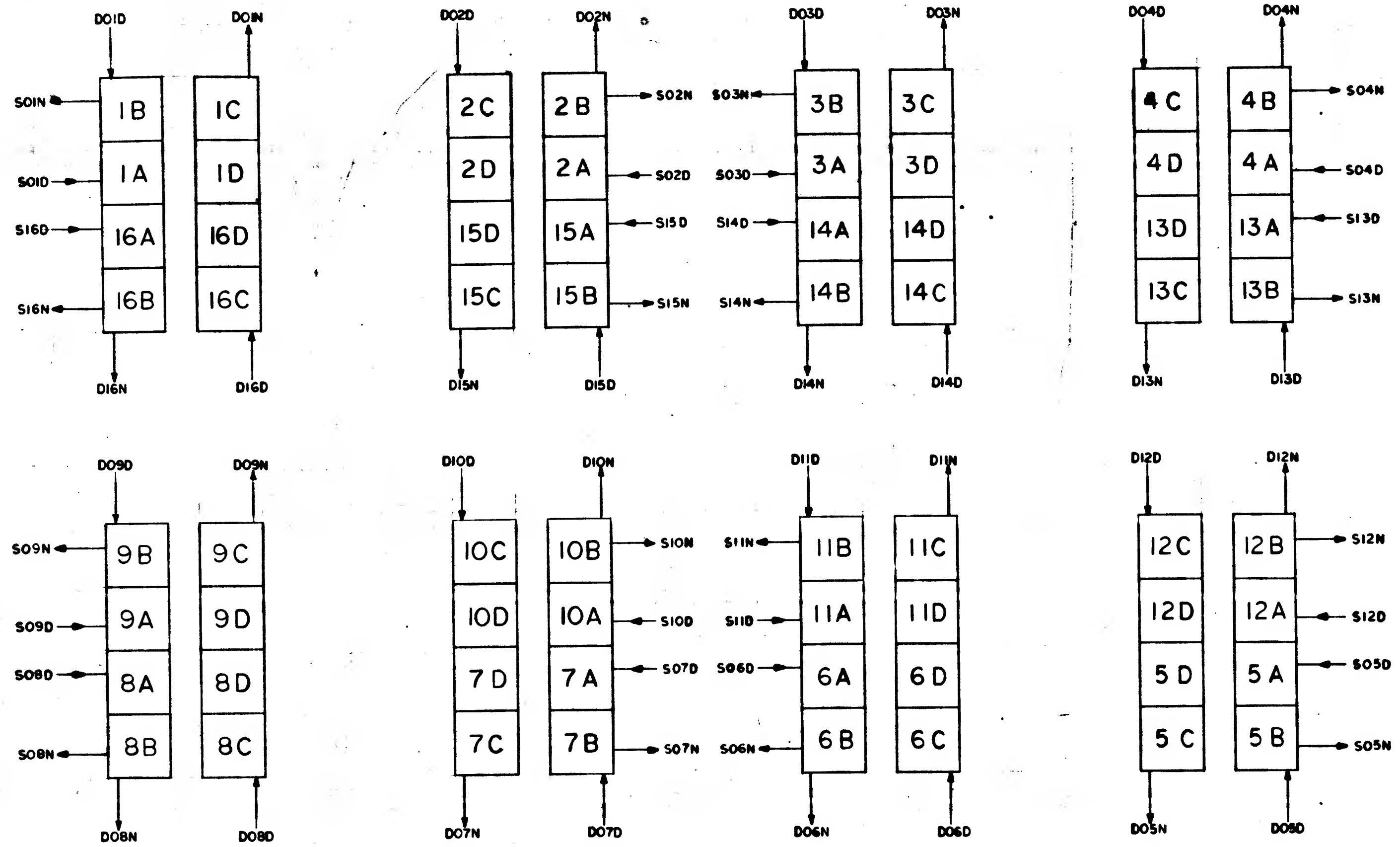
REVISIONS TDRR 00076

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00438		
B	UPGRADED FROM CLASS B TO CLASS A PER TDRR 01826	7/4/63	



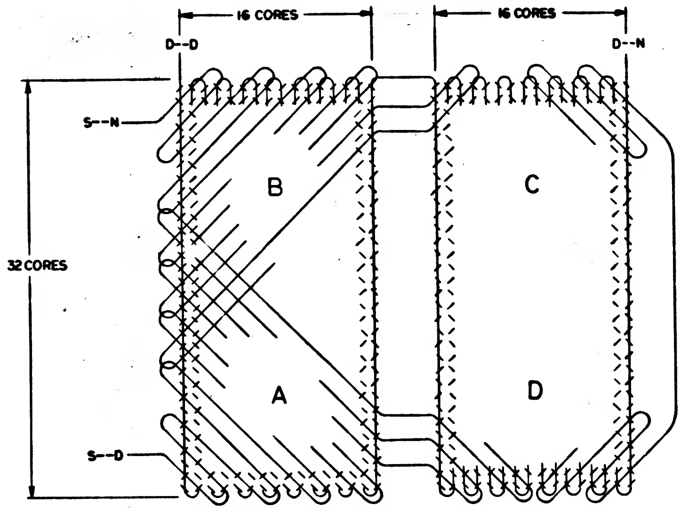


FIG. I

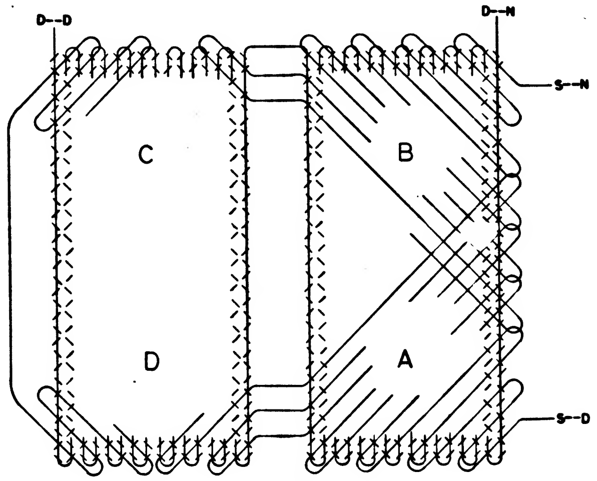


FIG. II

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. TYPICAL "SENSE" AND "DIGIT" WINDINGS FOR:
   - FIG I MATS #1, #3, #9; #11
   - FIG II MATS #2, #4, #10; #12
   - FIG III MATS #16, #14, #8; #6
   - FIG IV MATS #15, #13, #7; #5

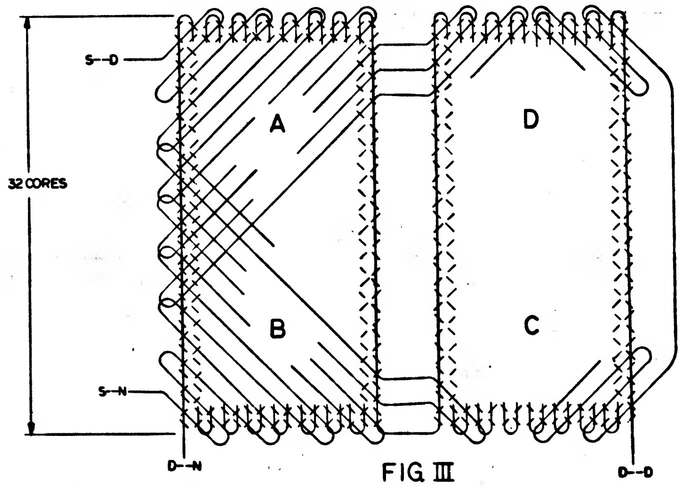


FIG. III

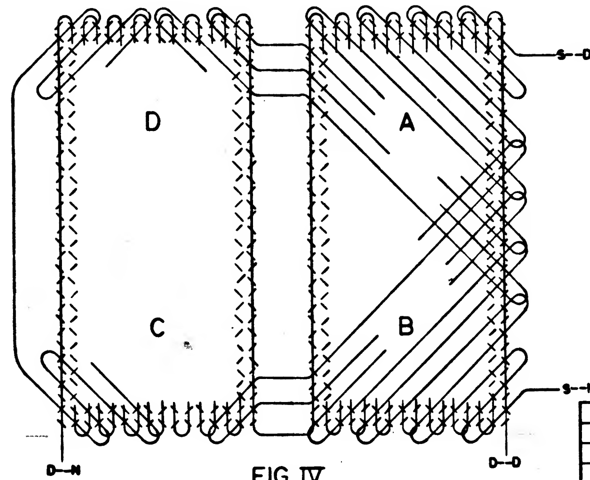


FIG. IV

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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DWG. NO. CONTRACT
DRAWN DATE 10-5-62
CHECKED 10-23-62
APPROVAL
APPROVAL Eldon C. Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
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SENSE AND INHIBIT WIRING
ERASABLE MEMORY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006056
SCALE —
WT —
SHEET 1 OF 1

1006056 B

INCHES
PHOTOGRAPHIC SCALE ONLY

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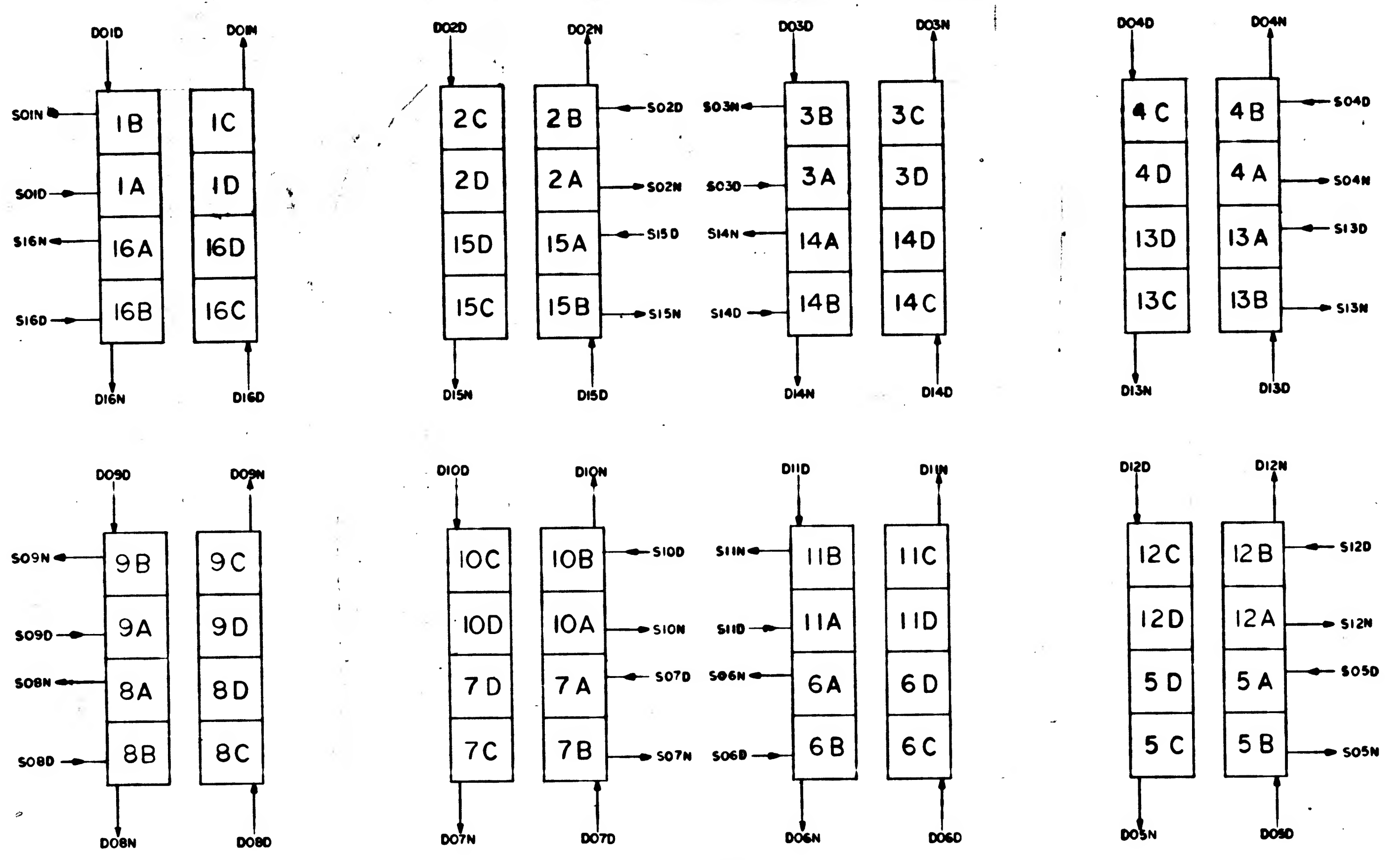
REVISIONS TDRR 00016

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00438	10 FEB 63	
B	UPGRADED FROM CLASS B TO CLASS A PER TDRR 01826	28 JUN 63 7/4/63	
C	CHANGED PER TDRR 19691 DR K Washington CHK C DeMauro	9/4/65	



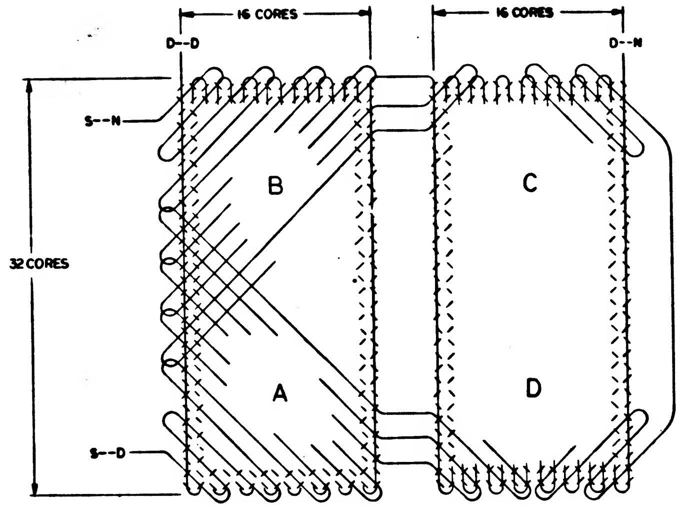


FIG. I

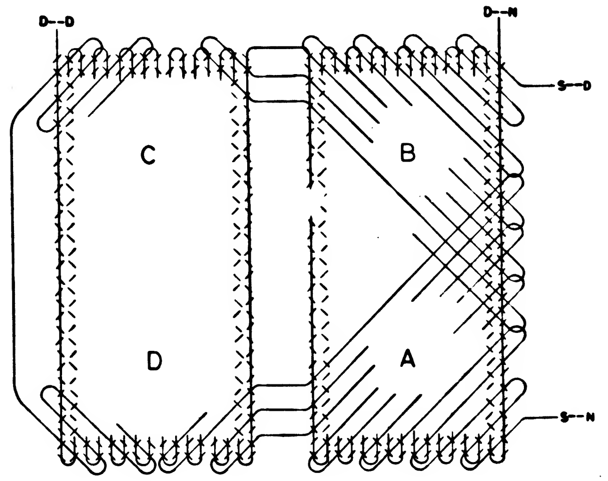


FIG. II

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. TYPICAL "SENSE" AND "DIGIT" WINDINGS FOR:
   - FIG I MATS #1, #3, #9, #11
   - FIG II MATS #2, #4, #10, #12
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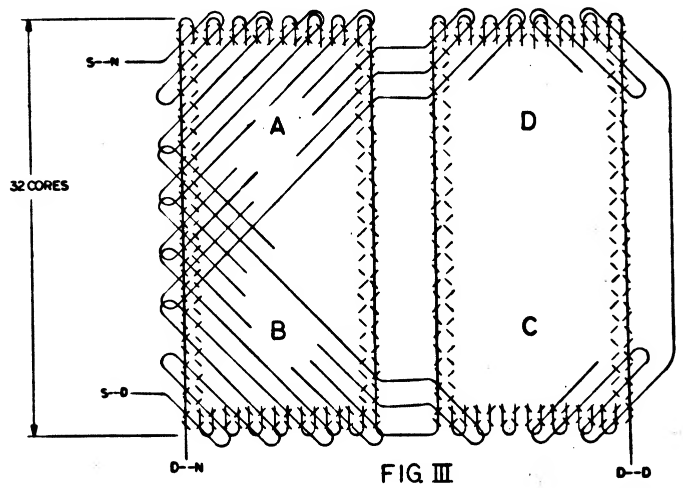

FIG. III

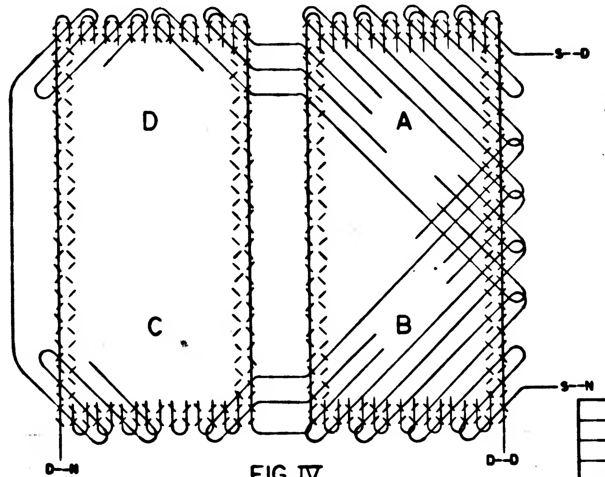

FIG. IV

MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
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TOLERANCES ON
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DRAWN J. Falzone DATE 10-5-62
CHECKED P. Whitman 10-22-62
APPROVAL Earl Stewart 10-26-62
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL 10/31/62

MANNED SPACECRAFT CENTER
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SENSE AND INHIBIT WIRING
ERASABLE MEMORY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006056
SCALE —/— | WT —/— | SHEET 1 OF 1

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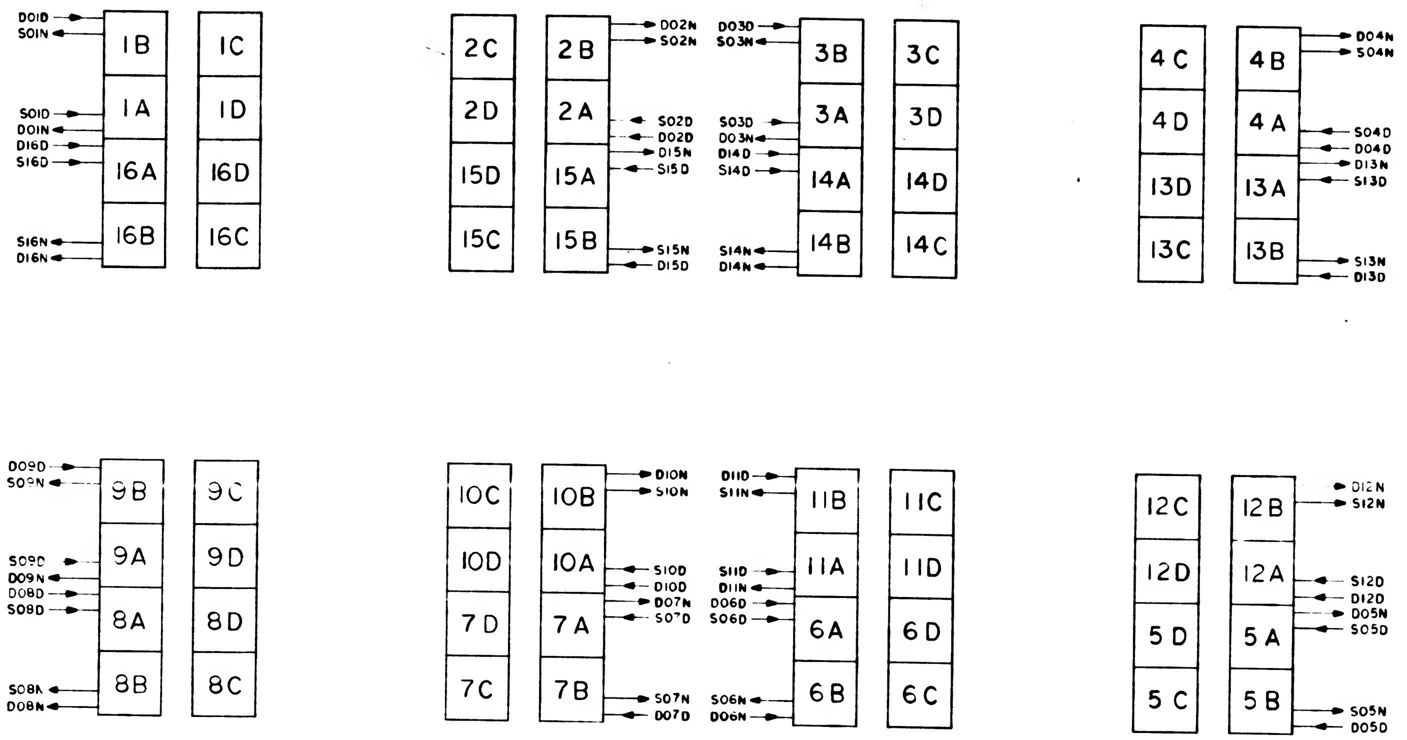
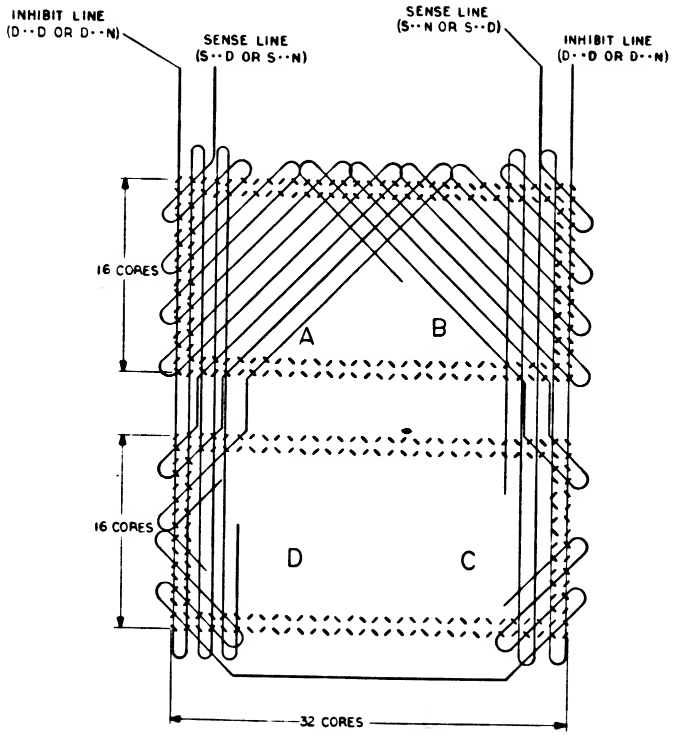
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00076 DATE 10-24-62



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

INCHES
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
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TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
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INSTRUMENTATION LAB
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CHECKED P Whitt 10-23-62
APPROVAL Tod Stanley 10-24-62
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL 10/24/62

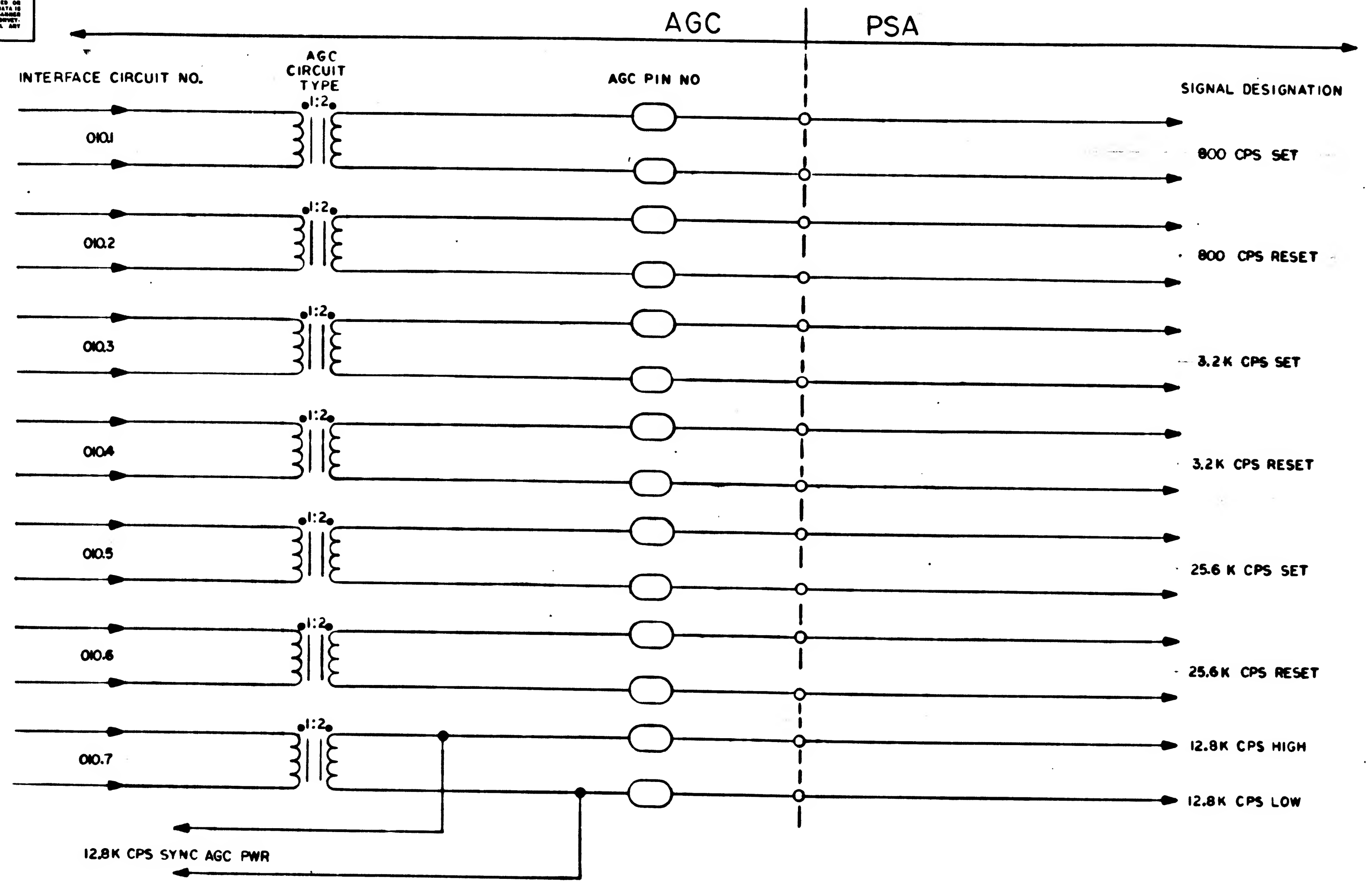
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SENSE AND INHIBIT WIRING ERASABLE MEMORY

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006056
SCALE
WT
SHEET 1 OF 1

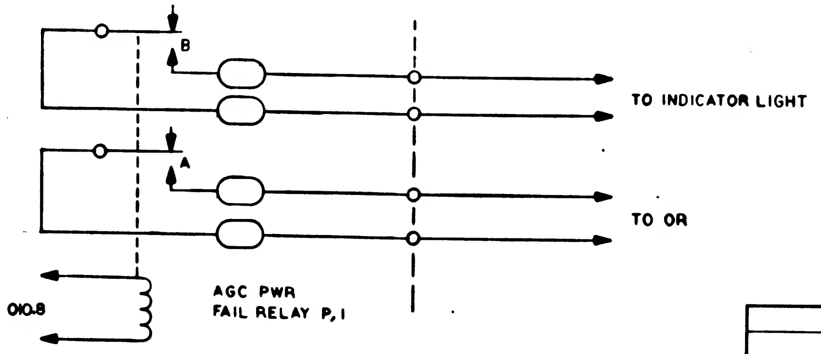
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
	RELEASED CLASS A PER TDRR 00084	10/24/62	WAR



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

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APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

DRAWN J. Falcone DATE 23-10-62
CHECKED Joe Morton
APPROVAL
APPROVAL Eldon C Hall
NASA APPROVAL 10-31-62
MIT APPROVAL 10/31/62

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AGC OUTPUTS
PSA INTERFACE IDENT
APOLLO GUIDANCE COMPUTER

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006060
SCALE
WT
SHEET 10 OF 14

1006060

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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
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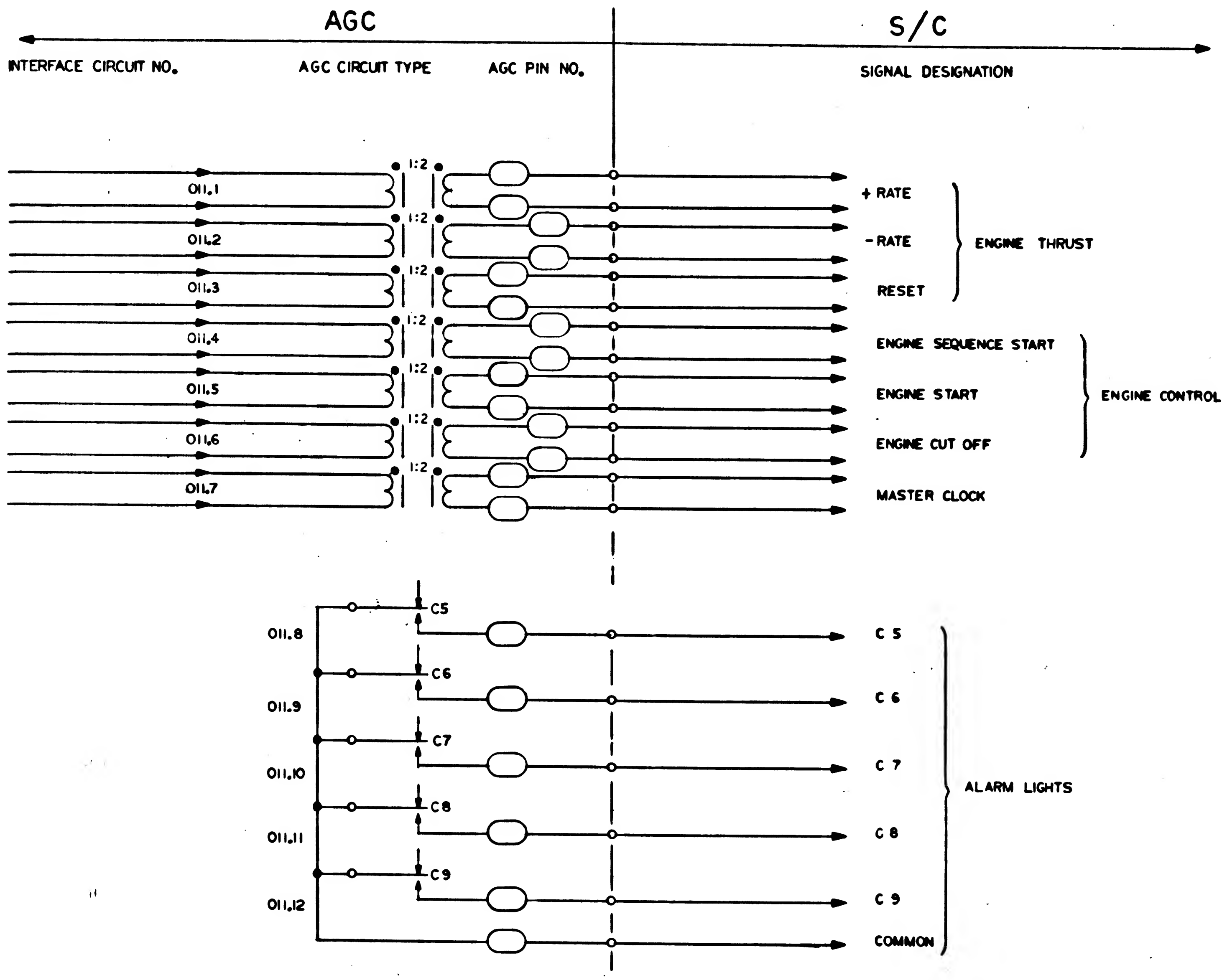

NOTES:-

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

INCHES
PHOTOGRAPHIC SCALE ONLY

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APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN [illegible] DATE 6-13-62
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NASA APPROVAL [illegible] 10-31-62
MIT APPROVAL [illegible] 10/31/62

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HOUSTON, TEXAS

AGC OUTPUTS
S/C INTERFACE IDENT
APOLLO GUIDANCE COMPUTER

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006060
SCALE — | WT | SHEET 11 OF 14

1006060

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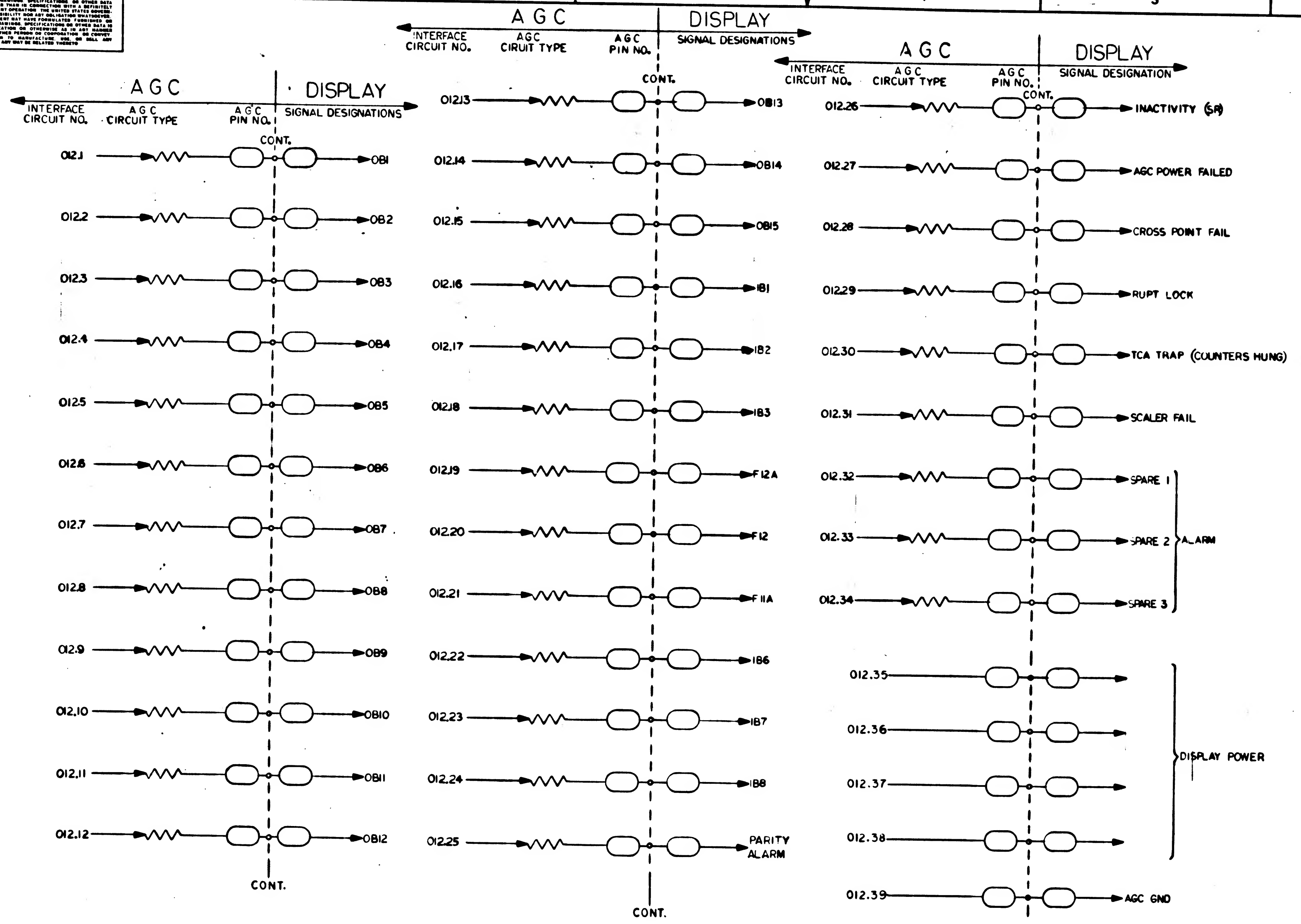

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARD PERSCRIBED BY MIL-D-70327

INCHES
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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CAMBRIDGE, MASS
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DRAWN J. Bradon DATE 10/24/62
CHECKED Joe Marton
APPROVAL E. Duggan
APPROVAL Eldon C. Hall
NASA APPROVAL W. J. Rhine 10-31-62
MIT APPROVAL W. Kupfer 10/31/62

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CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006060
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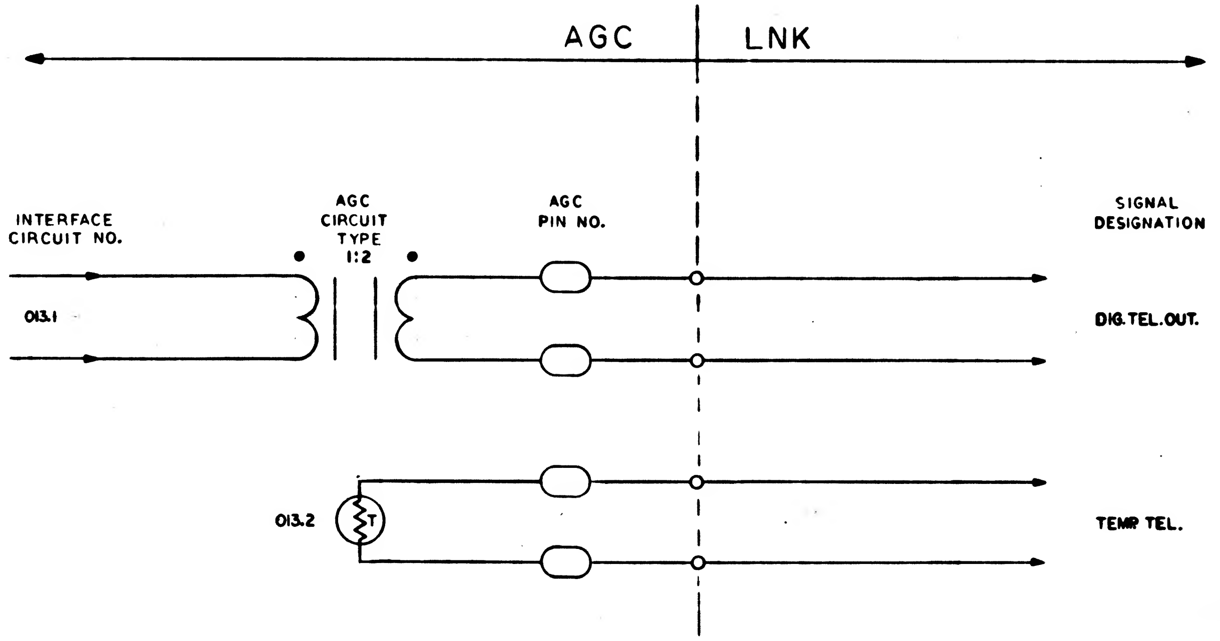

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1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

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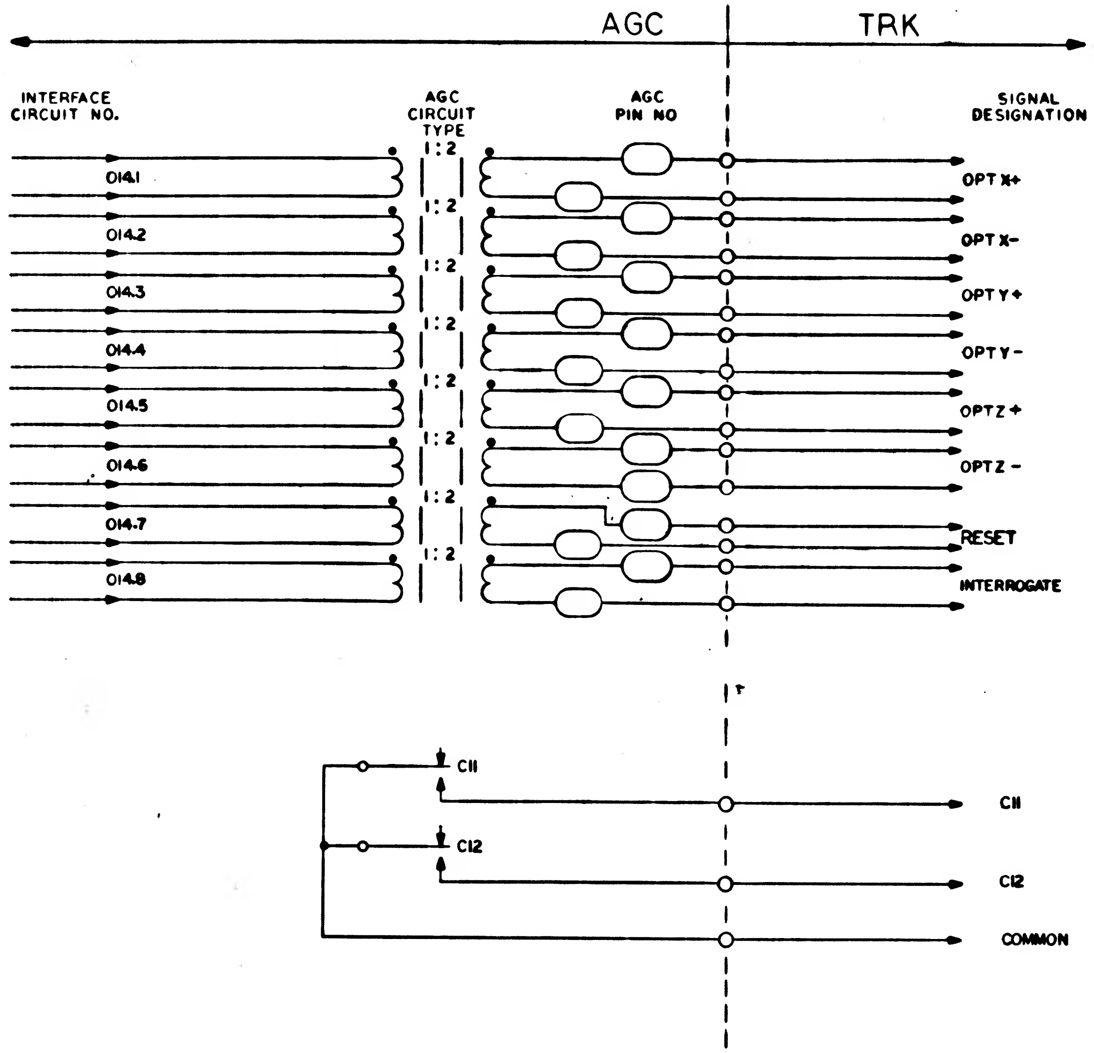

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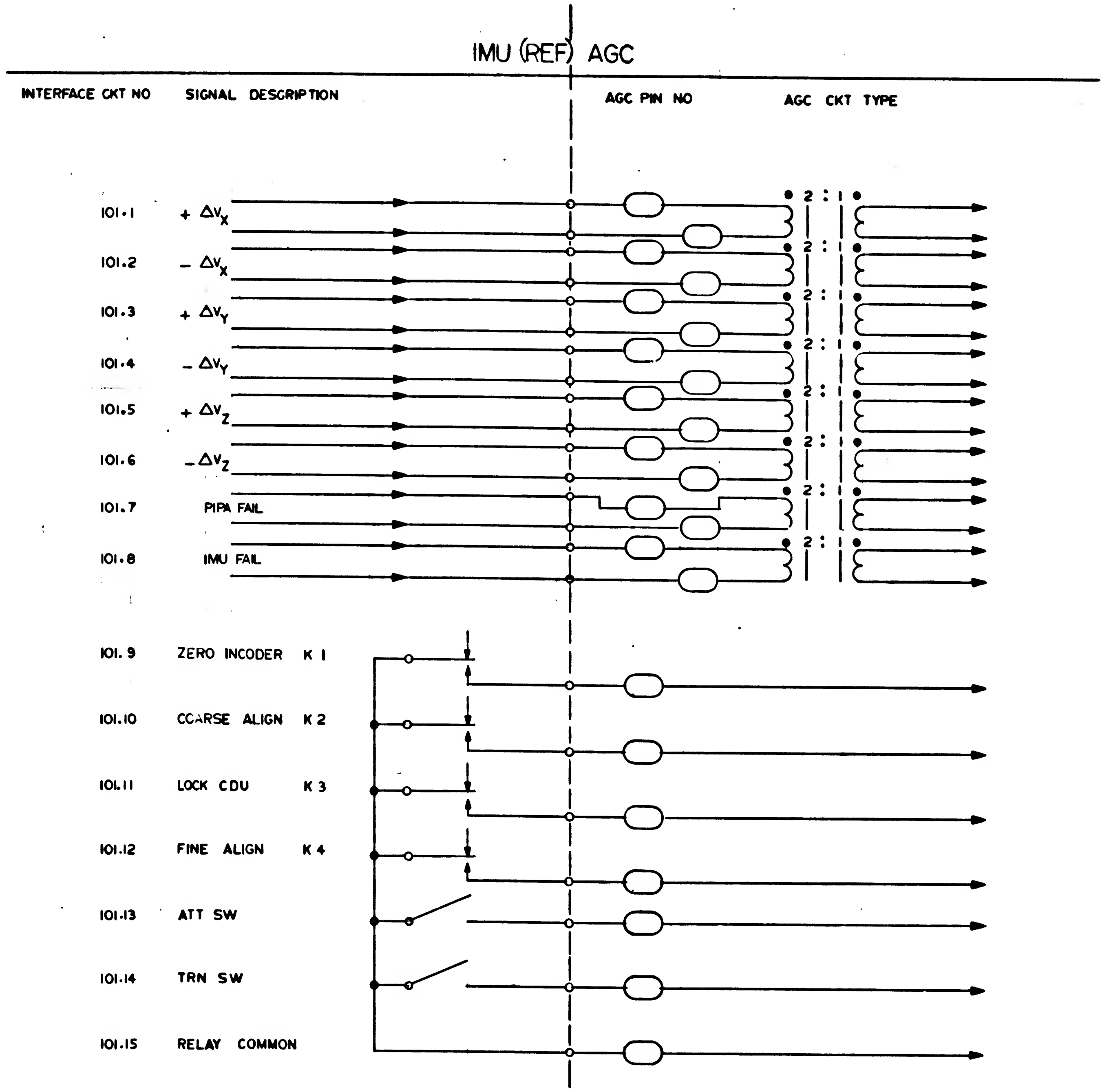

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APPROVAL Eldon C. Hall
NASA APPROVAL W. J. Rhine 10-31-62
MIT APPROVAL W. J. Kupfer 10/31/62

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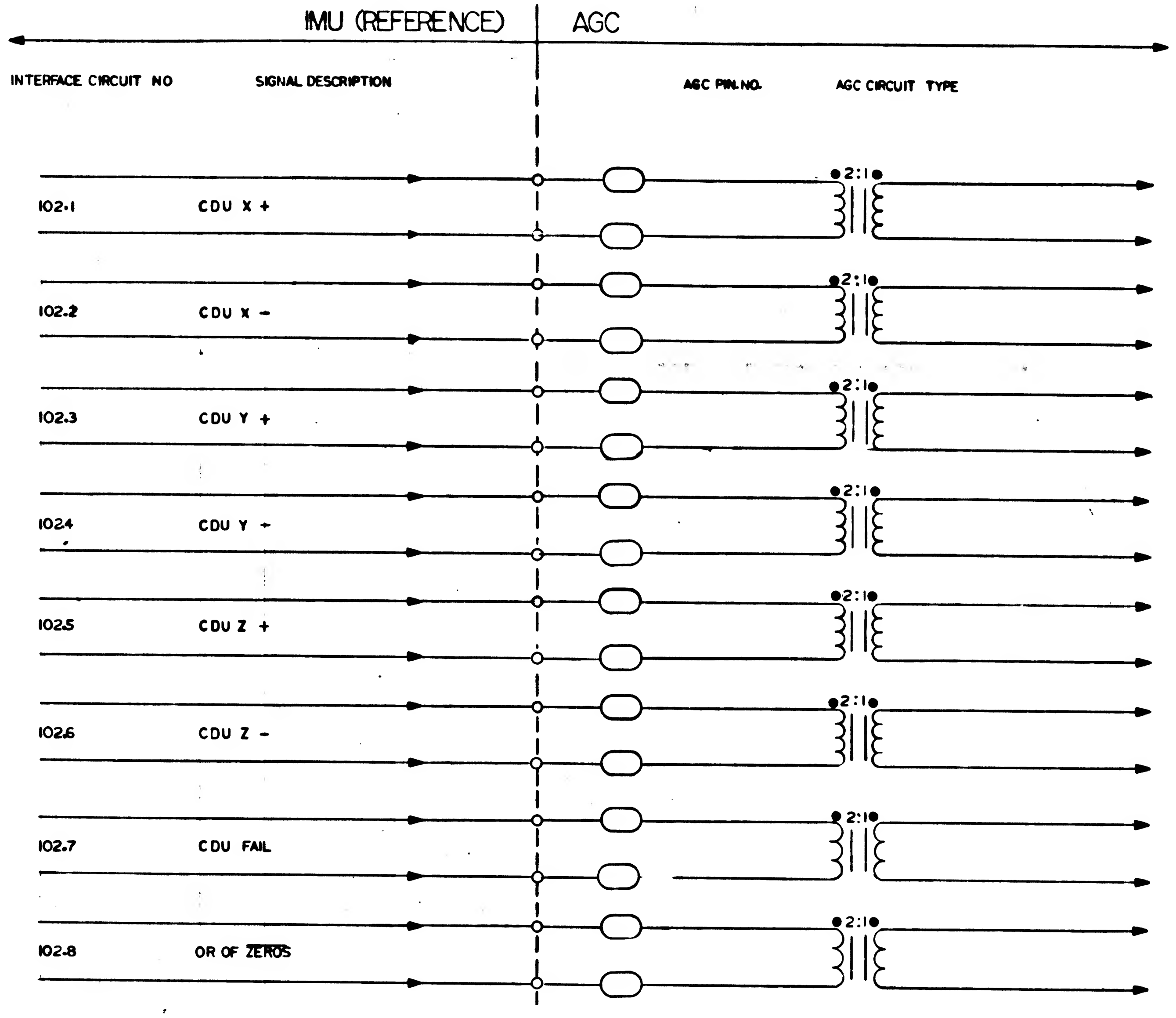

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APPROVAL
APPROVAL Eldon C. Hall
NASA APPROVAL 10-31-62
MIT APPROVAL 10/31/62

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REVISIONS			
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NONE (SEE NOTE)

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1. SIGNALS PHYSICALLY ORIGINATING IN THE PSA CAN BE FOUND WHERE THEY LOGICALLY ORIGINATE

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QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

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DRAWN DATE 10-22-62
CHECKED
APPROVAL
APPROVAL Eldon C Hall
NASA APPROVAL 10/31-62
MIT APPROVAL 10/31/62

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AGC INPUTS
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SHEET 3 OF 14

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REVISIONS

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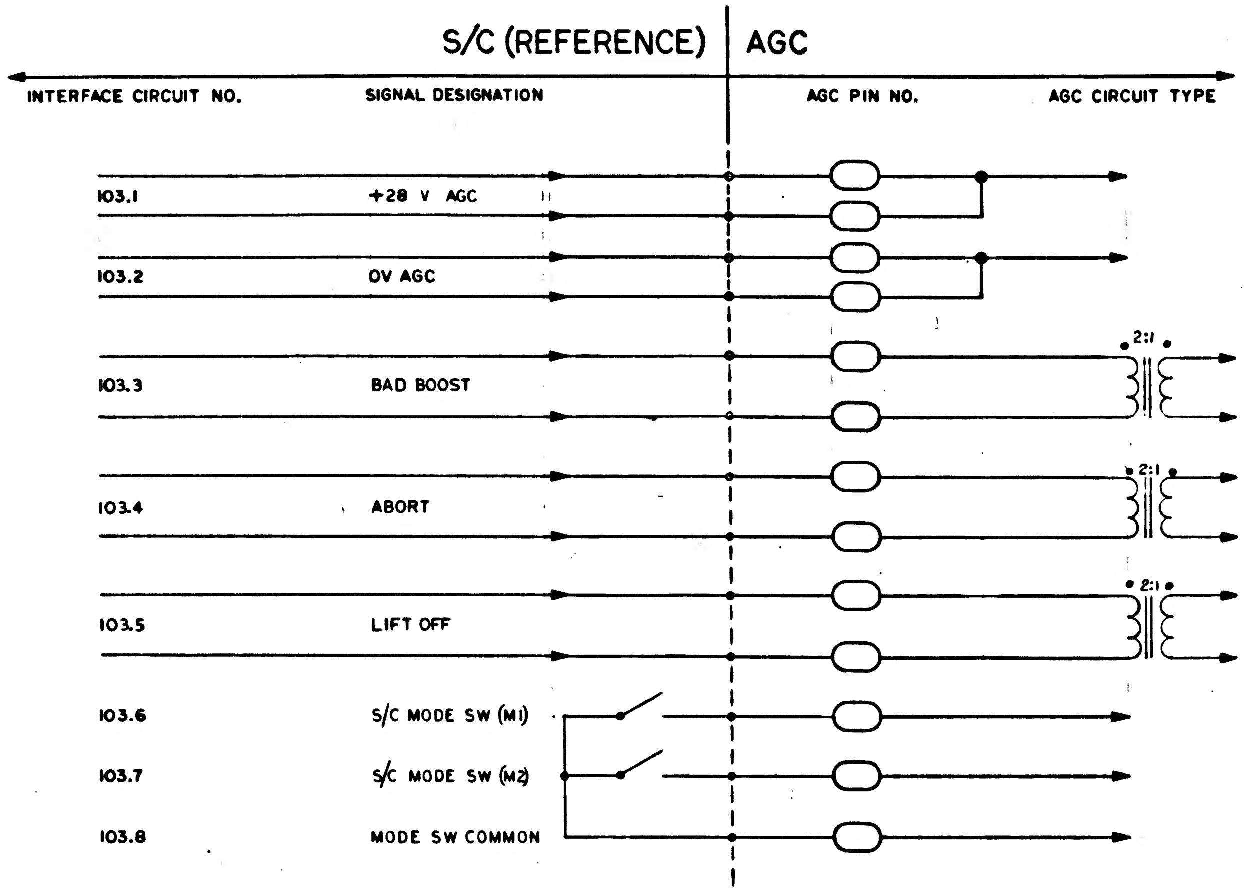

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARD PRESCRIBED BY MIL-D-70327

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APPROVAL Eldon C Hall
NASA APPROVAL [illegible] 10-31-62
MIT APPROVAL [illegible] 10/31/62

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AGC INPUTS
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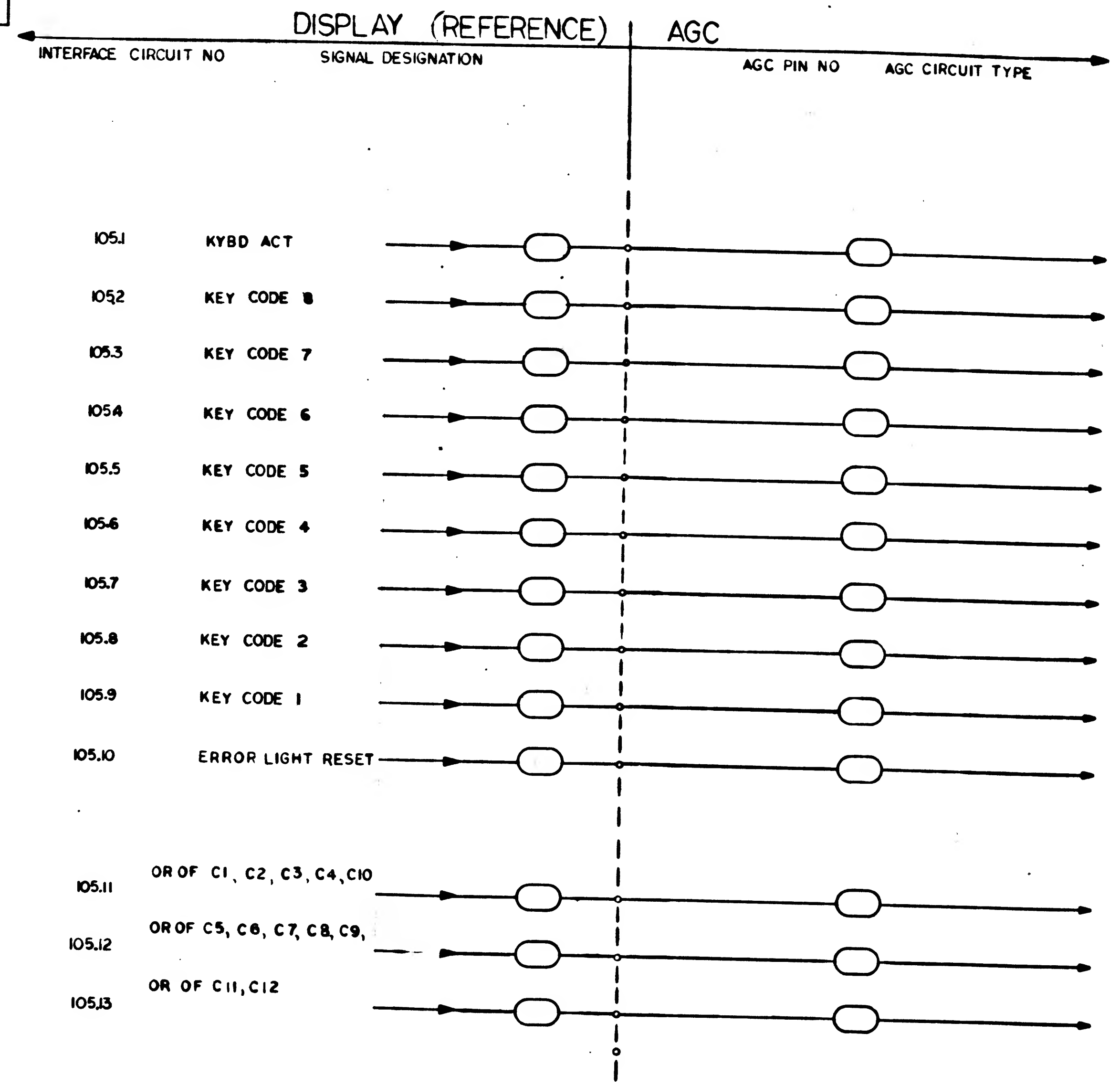

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AGC INPUTS
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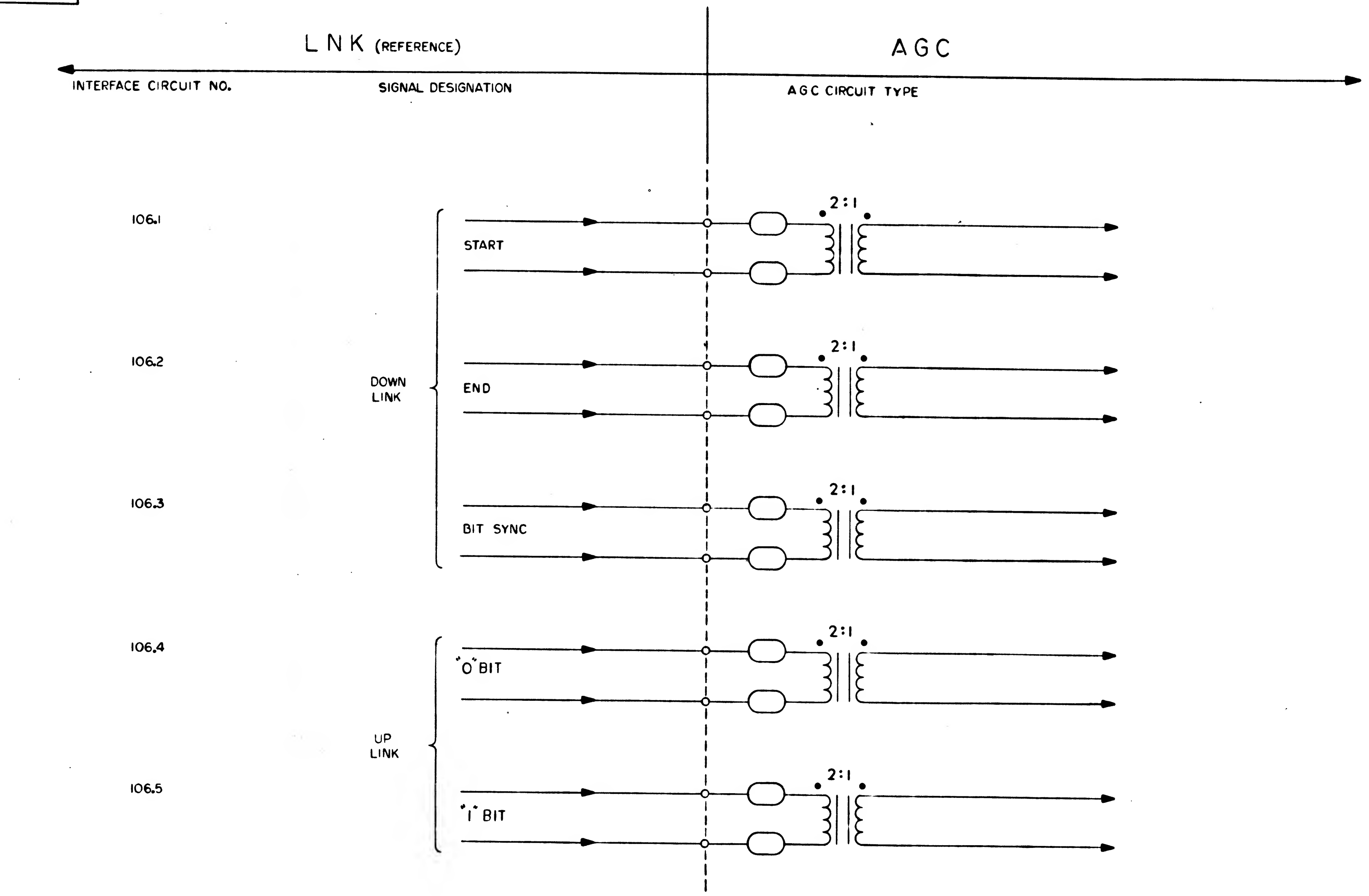

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1-INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

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NASA APPROVAL W.J. Rhine 10-31-62
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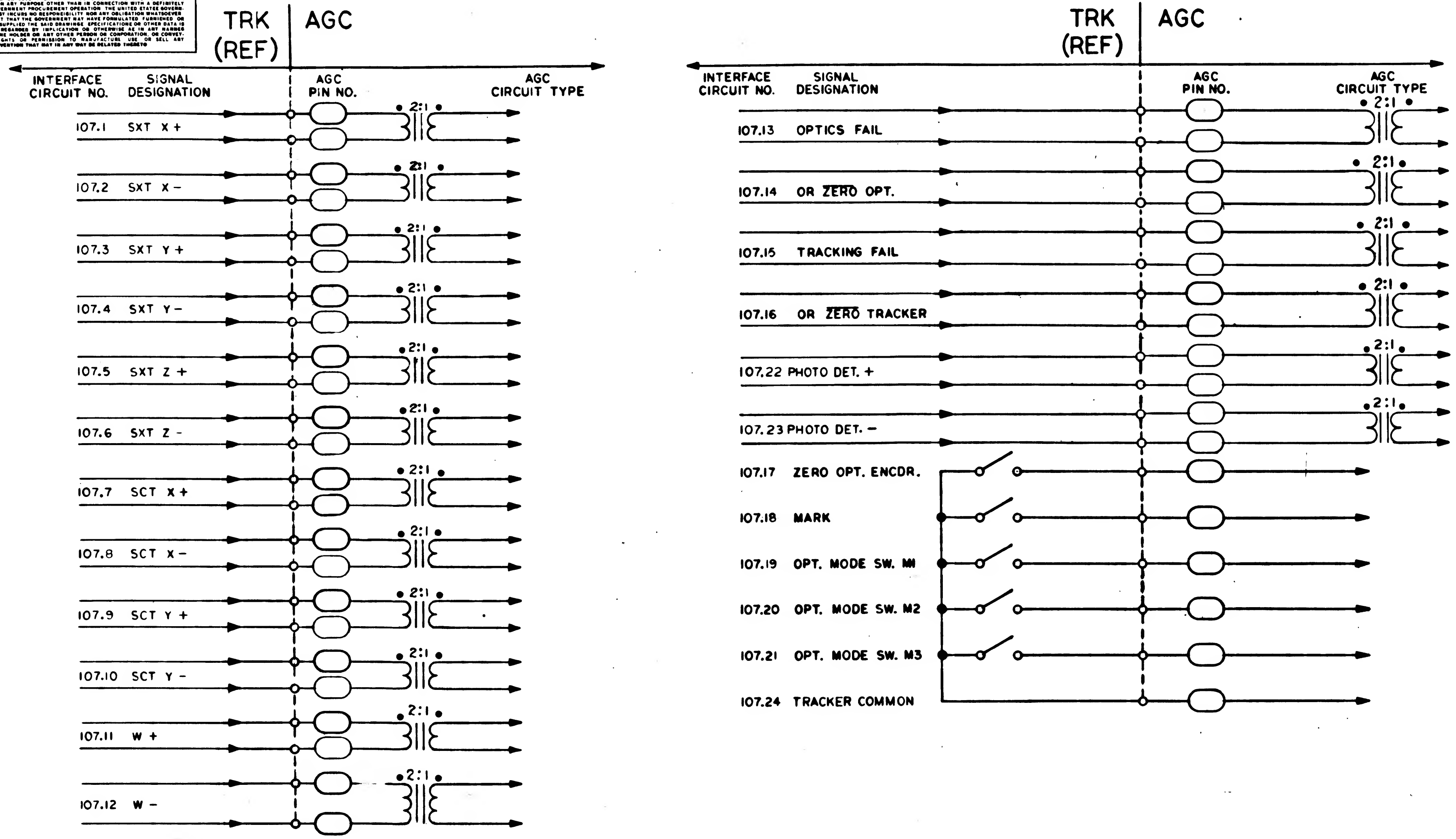

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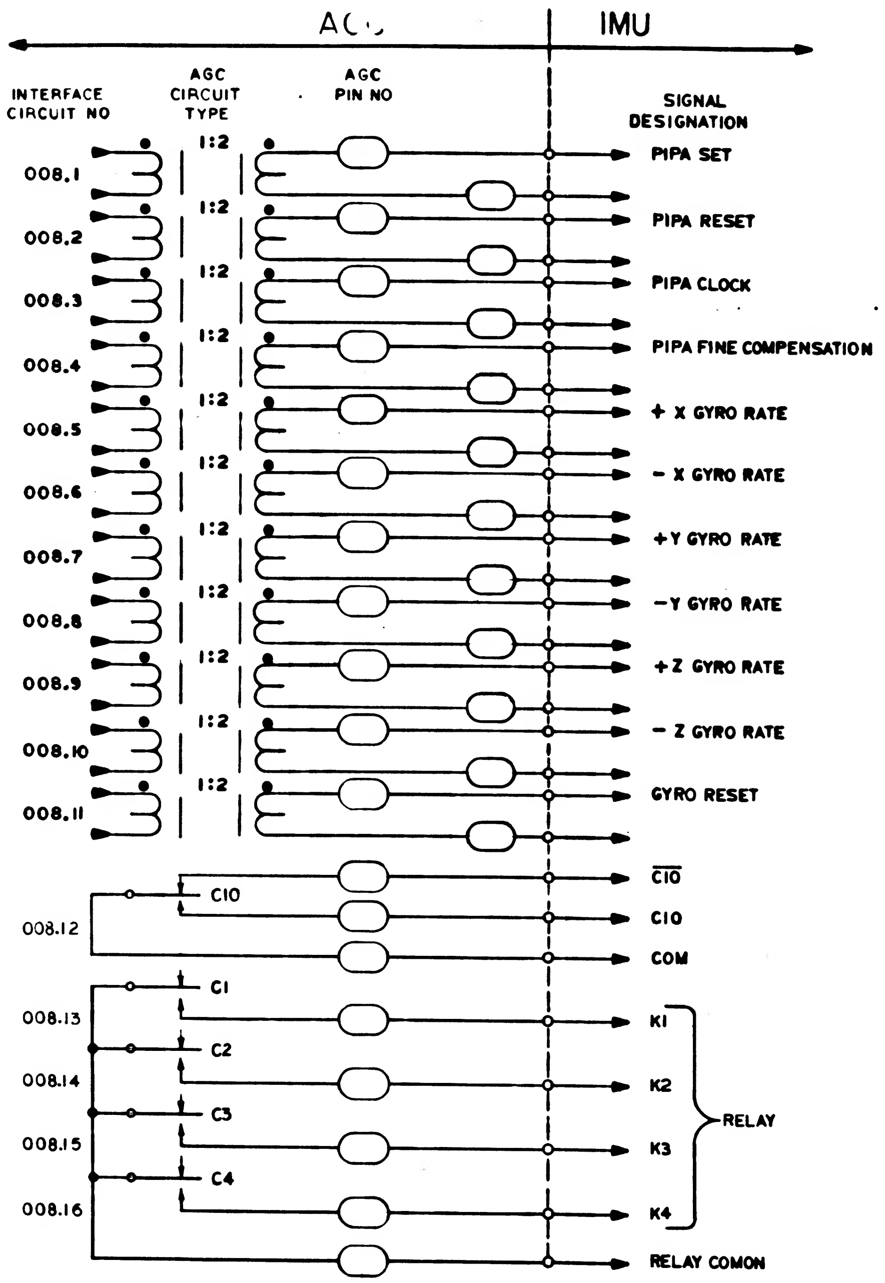

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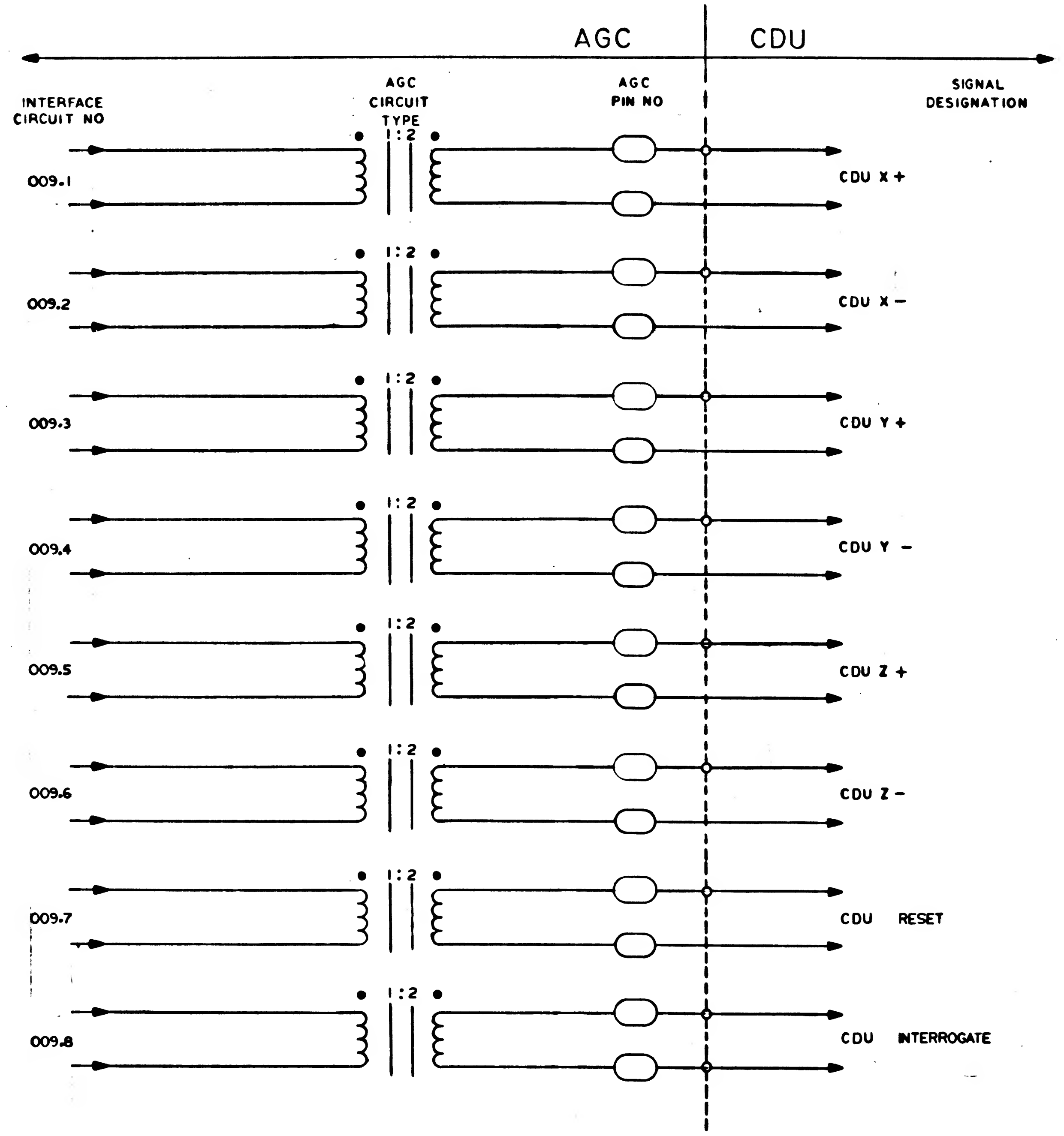
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
	RELEASED CLASS A PER TDRR 00084	03062 10/31/62	WR



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —//— DECIMALS ± —//— ANGLES ± —//—
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN A Dupelo DATE 4/22/62
CHECKED J. Morton
APPROVAL D. Duggan
APPROVAL Eldon C Hall
NASA APPROVAL W J Rhine 10-31-62
MIT APPROVAL W Kupfer 10/31/62

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC OUTPUTS
CDU INTERFACE IDENT
APOLLO GUIDANCE COMPUTER

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	D	1006060

SCALE —//— WT —//— SHEET 9 OF 14

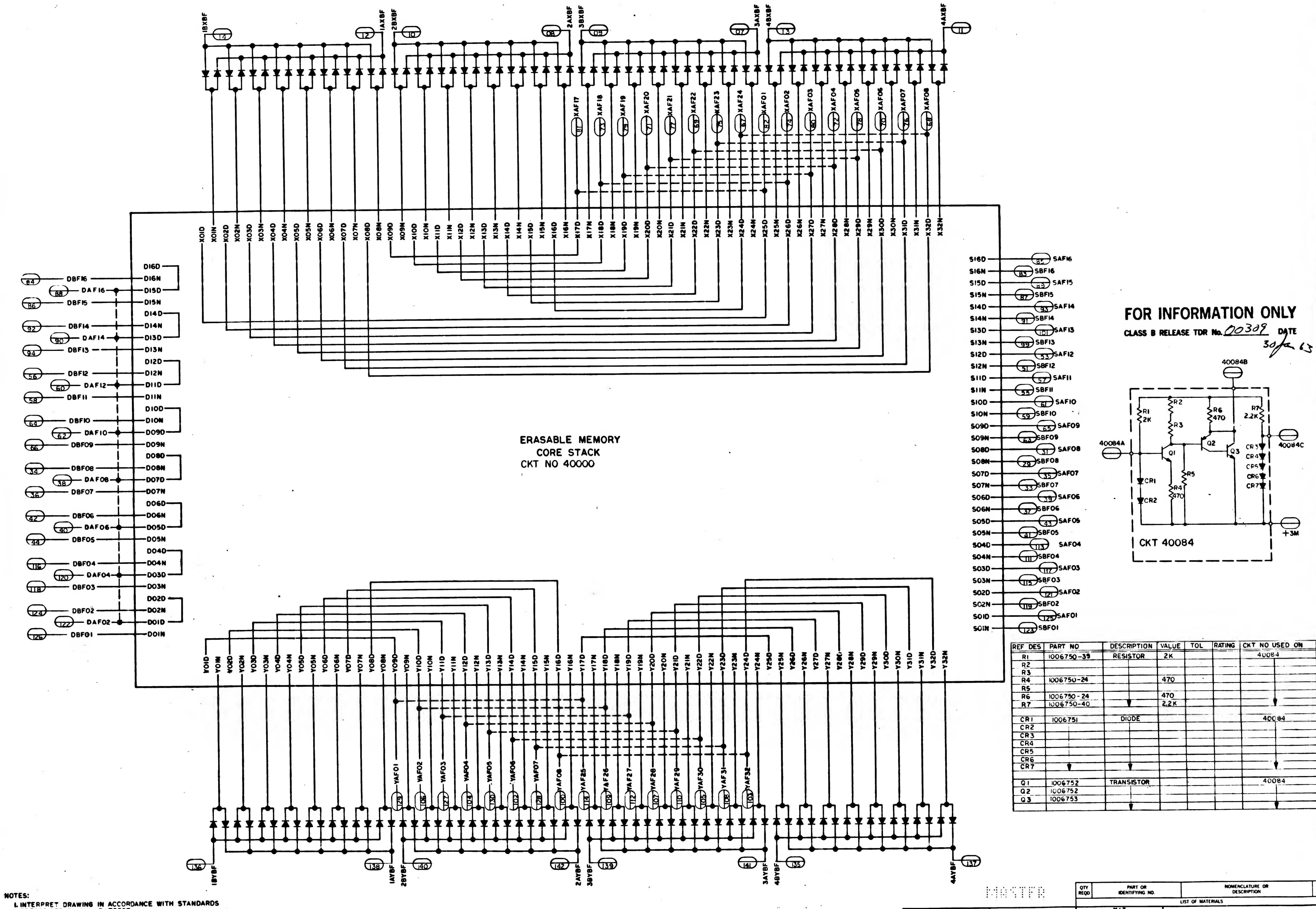
1006060

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR00674	3-27-63	ECH WK

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00309 DATE 30 Jan 63



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R2						
R3						
R4	1006750-24		470			
R5						
R6	1006750-24		470			
R7	1006750-40		2.2K			
CR1	1006751	DIODE				40084
CR2						
CR3						
CR4						
CR5						
CR6						
CR7						
Q1	1006752	TRANSISTOR				40084
Q2	1006752					
Q3	1006753					

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327.
2. DASHED LINES INDICATE WIRE WRAP CONNECTIONS.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT

DRAWN Healy DATE 12-11-62
CHECKED 1/22/63
APPROVAL 29 JAN 63
APPROVAL E C Hall 29 Jan 63
NASA APPROVAL 1-30-63
MIT APPROVAL 30 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE MEMORY STICK

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006061
SCALE #
WT
SHEET 1 OF 1

1006061 A

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
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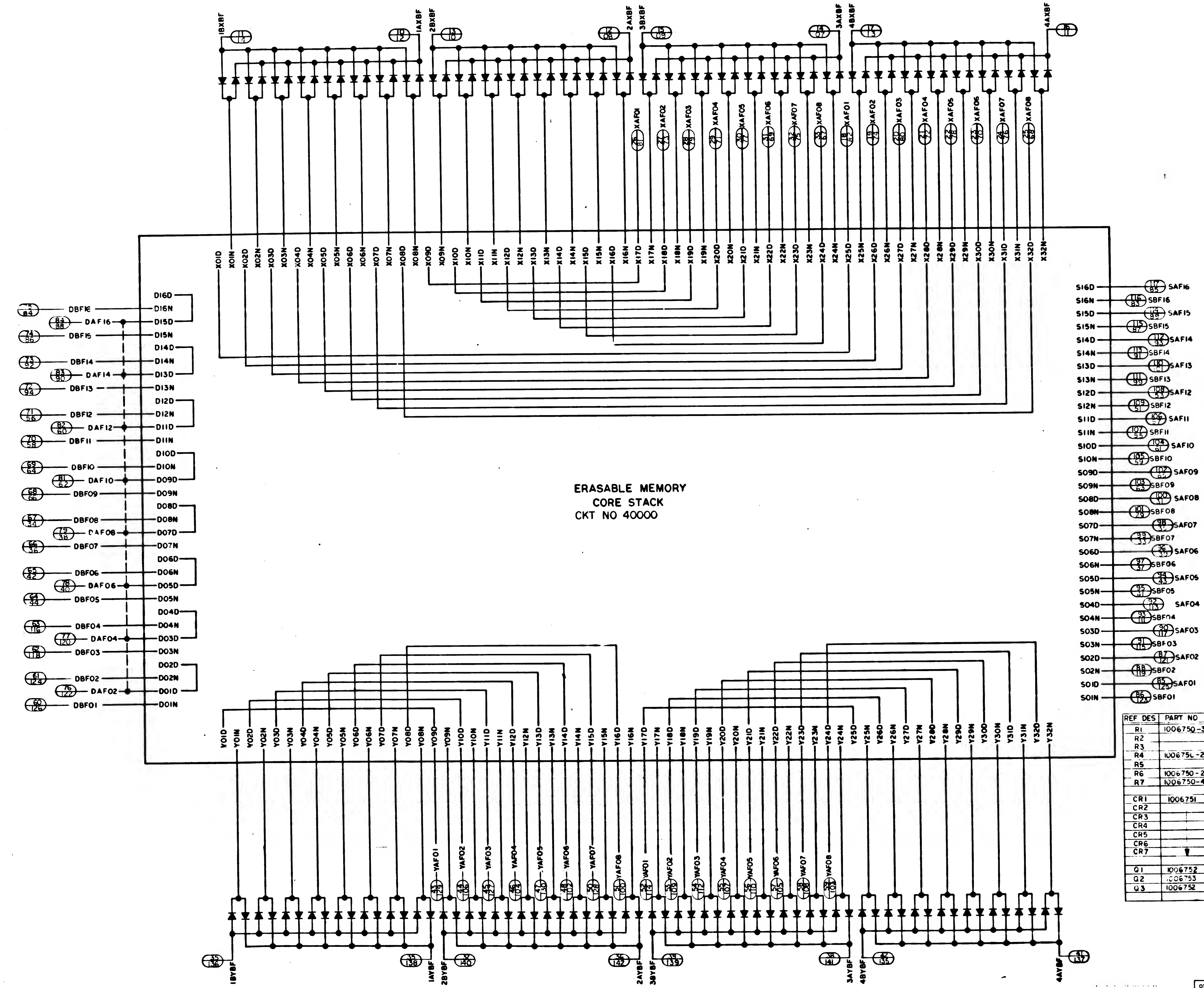
B	REVISED PER TDRR 01169	5-8-63	ECH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XAF06
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DBF01
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D08D D08N D07D D07N D06D D06N D05D D05N D04D D04N D03D D03N D02D D02N D01D D01N
ERASABLE MEMORY
CORE STACK
CKT NO 40000
S16D S16N S15D S15N S14D S14N S13D S13N S12D S12N S11D S11N S10D S10N S09D S09N
S08D S08N S07D S07N S06D S06N S05D S05N S04D S04N S03D S03N S02D S02N S01D S01N
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SBF01
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Y25D Y25N Y26D Y26N Y27D Y27N Y28D Y28N Y29D Y29N Y30D Y30N Y31D Y31N Y32D Y32N
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YAF02
YAF03
YAF04
YAF05
YAF06
YAF07
YAF08
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1AYBF
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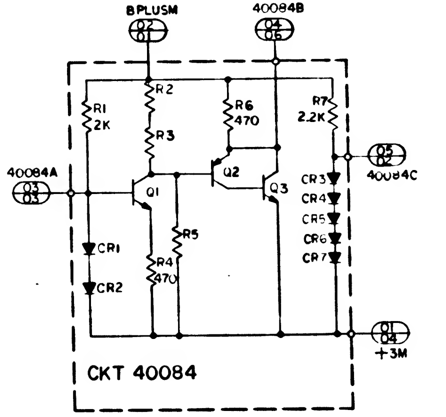
3BYBF
3AYBF
4BYBF
4AYBF

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00309 DATE 30 Jan 63



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING	CKT NO USED ON
R1	1006750-39	RESISTOR	2K			40084
R2						
R3						
R4	1006750-24		470			
R5						
R6	1006750-24		470			
R7	1006750-40		2.2K			
CR1	1006751	DIODE				40084
CR2						
CR3						
CR4						
CR5						
CR6						
CR7						
Q1	1006752	TRANSISTOR				40084
Q2	1006753					
Q3	1006752					

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN Ken Healy DATE 12-11-62
CHECKED 1/23/63
APPROVAL Alf Tanaka 1 JAN 63
APPROVAL E C Hall 29 Jan 63
NASA APPROVAL W J Rhine 1-30-63
MIT APPROVAL 30 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ERASABLE MEMORY STICK

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006061
SCALE #
WT
SHEET 1 OF 1

1006061

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00674	3/27/63	ECH WK
B	REVISED PER TDRR 01169	5-8-63	ECH
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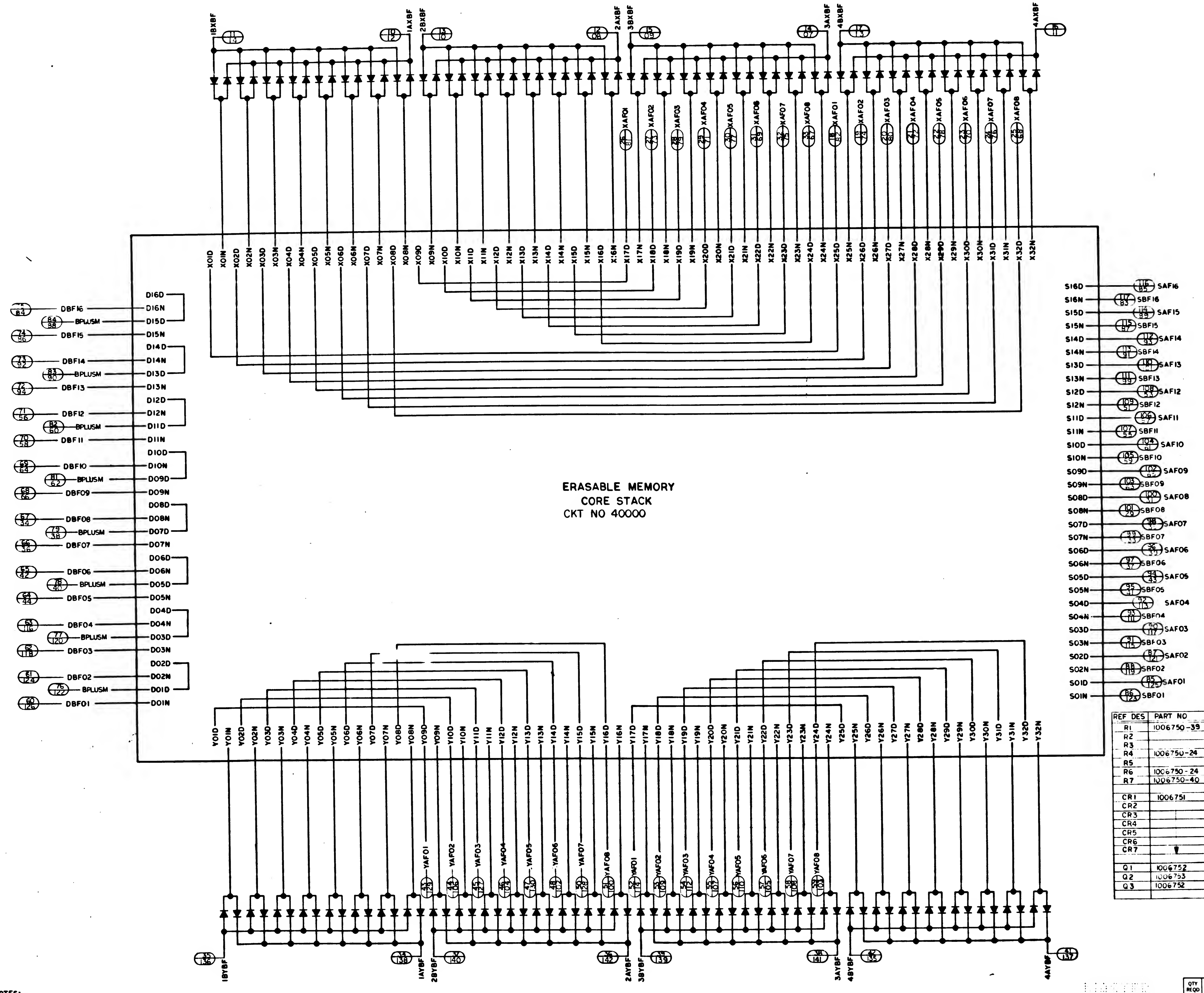
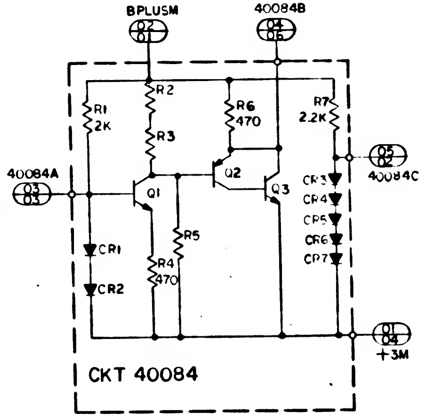


FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00309 DAT 30 Jan 63



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING	CKT NO USED ON
R1	1006750-39	RESISTOR	2K			40084
R2						
R3						
R4	1006750-24		470			
R5						
R6	1006750-24		470			
R7	1006750-40		2.2K			
CR1	1006751	DIODE				40084
CR2						
CR3						
CR4						
CR5						
CR6						
CR7						
Q1	1006752	TRANSISTOR				40084
Q2	1006753					
Q3	1006752					

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN Ken Healey DATE 12-11-62
CHECKED 1/23/63
APPROVAL 19 Jan 63
APPROVAL EC Hall 29 Jan 63
NASA APPROVAL 1-30-63
MIT APPROVAL Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE MEMORY STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006061
SCALE #
WT
SHEET 1 OF 1

1006061 C

INCHES
PHOTOGRAPHIC SCALE ONLY

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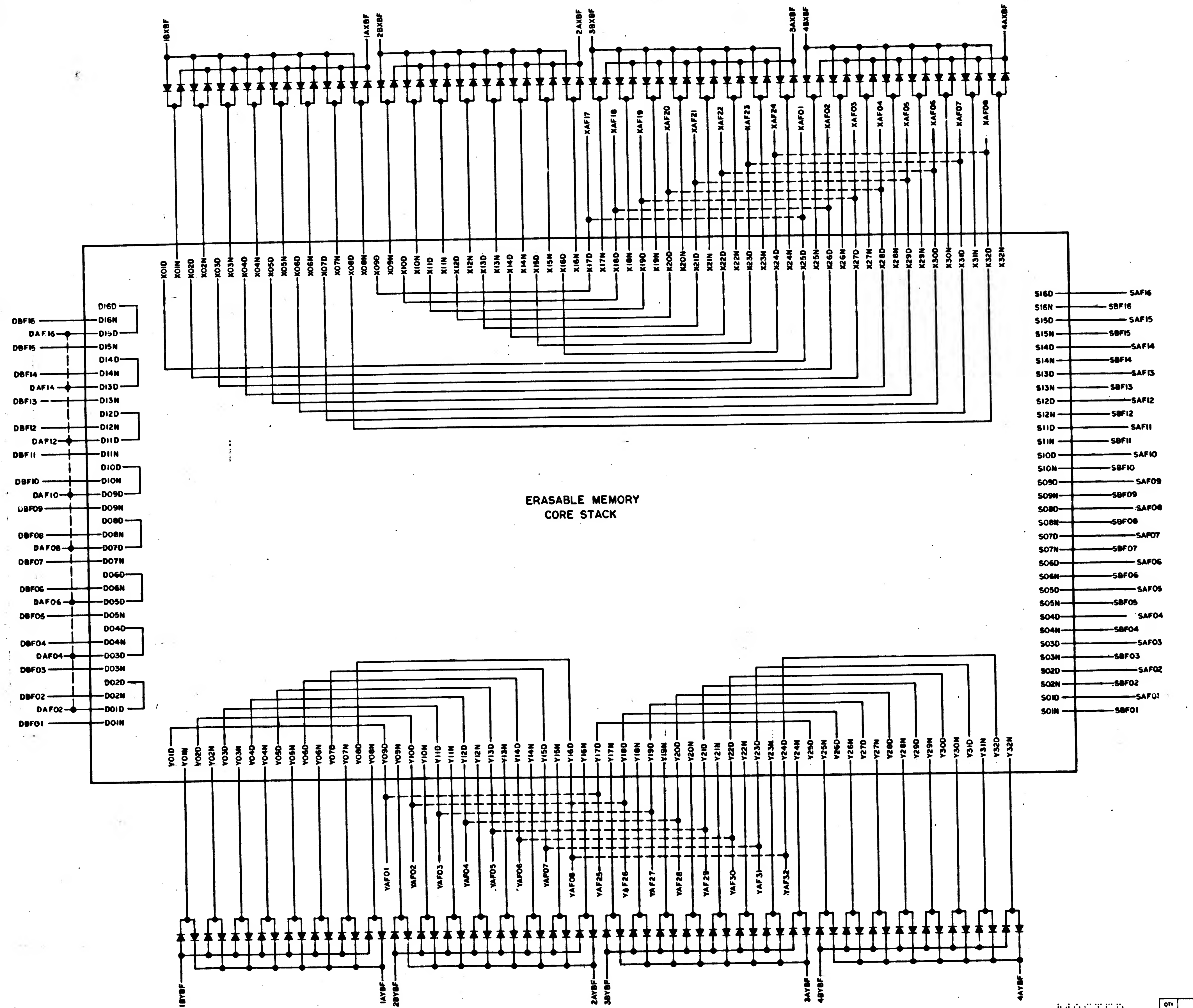


FOR INFORMATION ONLY
CLASS B RELEASE TDR No. 00309 DATE 30 Jan 63

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327.
2. DASHED LINES INDICATE WIRE WRAP CONNECTIONS.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO
CONTRACT
DRAWN DATE 12-11-62
CHECKED 1/28/63
APPROVAL W B Eccles 29 JAN 63
APPROVAL E C Hall 29 Jan 63
NASA APPROVAL 1-30-63
MIT APPROVAL 30 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

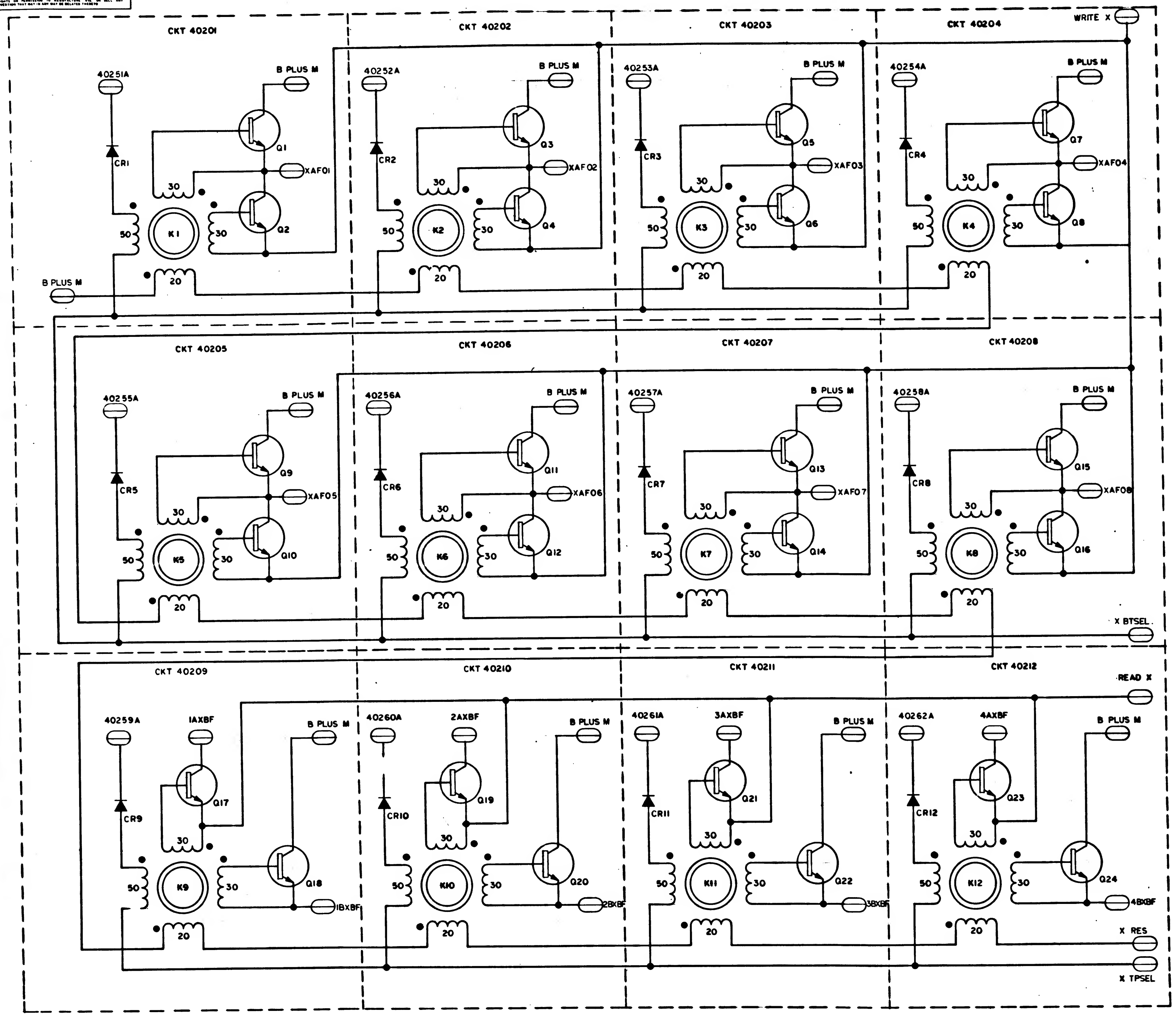
SCHEMATIC,
ERASABLE MEMORY STICK

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006061
SCALE #
WT
SHEET 1 OF 1

1006061

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR00658	3-13-63	RCH JK



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CR3					
CR4					
CR5					
CR6					
CR7					
CR8					
CR9					
CR10					
CR11					
CR12					
K1	1003084	CORE			
K2					
K3					
K4					
K5					
K6					
K7					
K8					
K9					
K10					
K11					
K12					
Q1	1006759	TRANSISTOR			
Q2					
Q3					
Q4					
Q5					
Q6					
Q7					
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Q10					
Q11					
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Q18					
Q19					
Q20					
Q21					
Q22					
Q23					
Q24					

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
3. NUMBERS SHOWN ADJACENT TO COILS INDICATE NUMBER OF TURNS.

FOR INFORMATION ONLY
CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

MASTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN Ken Healy DATE 1-4-63
CHECKED 3-5-63
APPROVAL Albert Hopkins 3-7-63
APPROVAL Eldon C Hall 3/6/63
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CURRENT SWITCHING STICK
(FOR ERASABLE MEMORY)

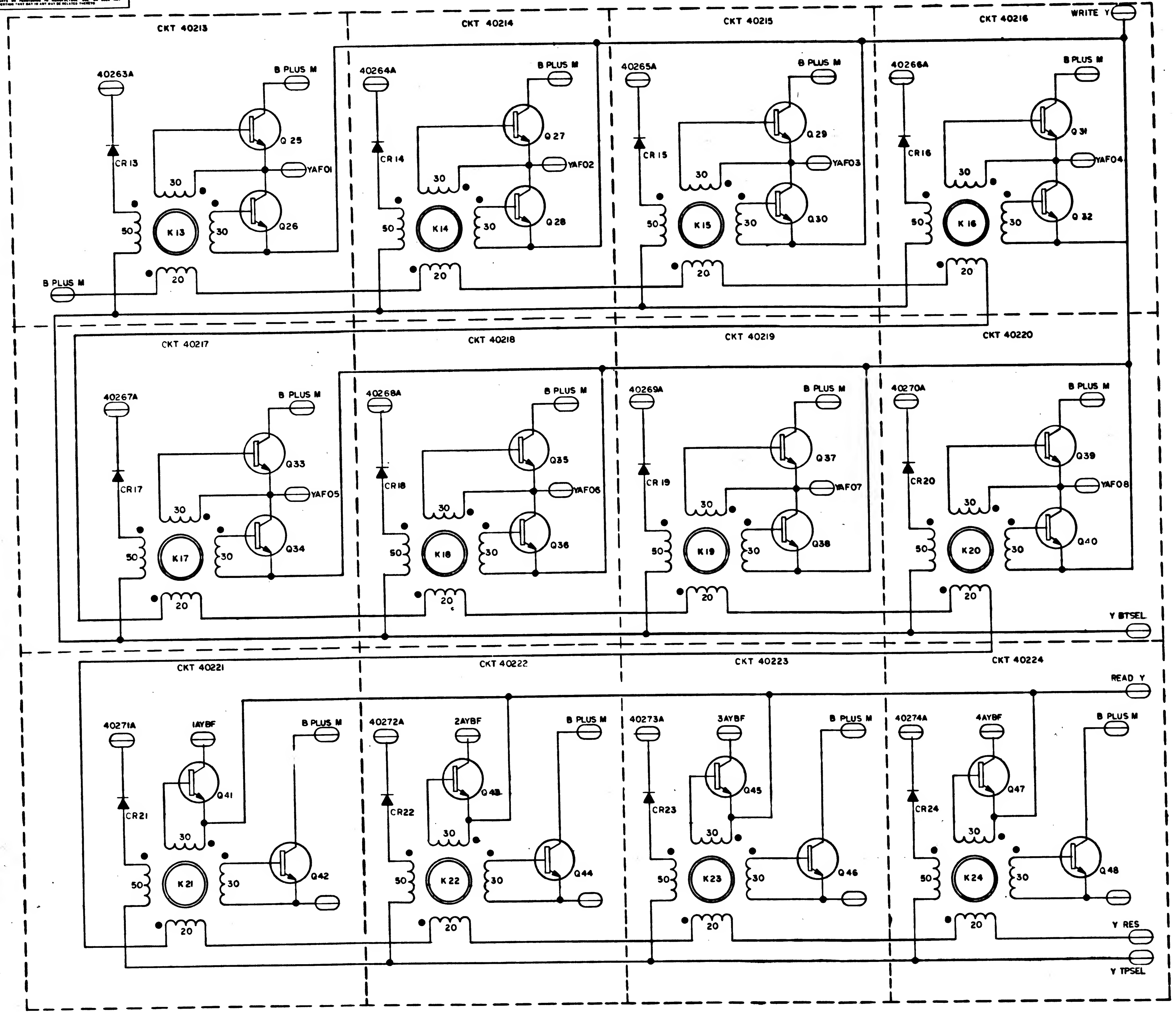
CODE IDENT NO | SIZE E | NASA DRAWING NO. 1006074
SCALE # | WT | SHEET 1 OF 2

1006074 A

INCHES 0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00558	3-12-63	



REF DESIG	PART NUMBER	DESCRIPTION	VALUE	TOL	RATING
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CR 15					
CR 16					
CR 17					
CR 18					
CR 19					
CR 20					
CR 21					
CR 22					
CR 23					
CR 24					
K 13	1003084	CORE			
K 14					
K 15					
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K 17					
K 18					
K 19					
K 20					
K 21					
K 22					
K 23					
K 24					
Q 25	1006759	TRANSISTOR			
Q 26					
Q 27					
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Q 39					
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Q 43					
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Q 46					
Q 47					
Q 48					

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH
3. NUMBERS SHOWN ADJACENT TO COILS INDICATE NUMBER OF TURNS

MASTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 2-4-63
CHECKED 3-5-63
APPROVAL 3-7-63
APPROVAL 3/4/63
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

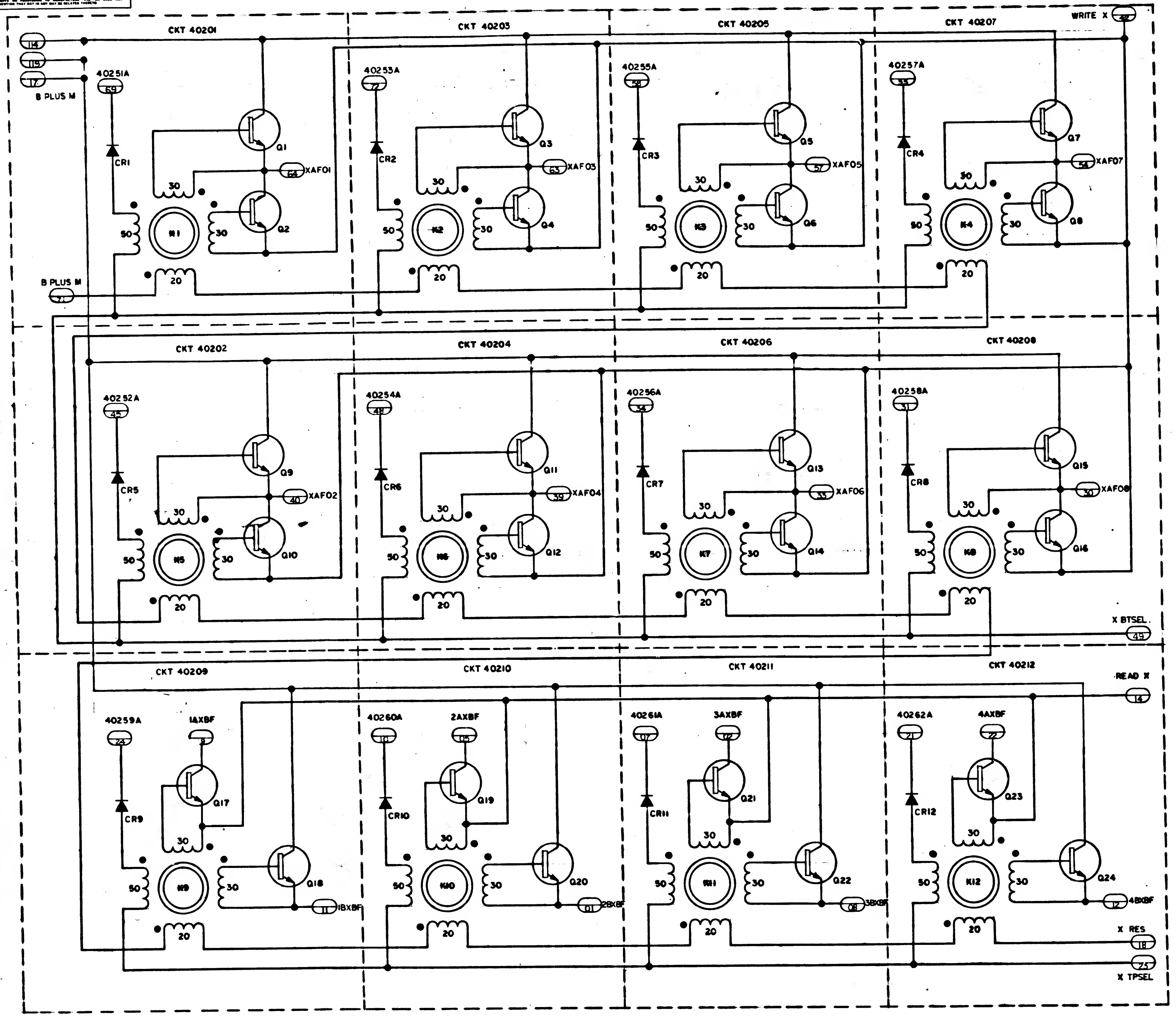
SCHEMATIC,
CURRENT SWITCHING STICK
(FOR ERASABLE MEMORY)

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006074
SCALE —
WT
SHEET 2 OF 2

1006074 A

INCHES
0 1
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.



REF DESIG	PART NUMBER	DESCRIPTION	VALUE	TOL	RATING
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CR3					
CR4					
CR5					
CR6					
CR7					
CR8					
CR9					
CR10					
CR11					
CR12	↓	↓			
K1	1003084	CORE			
K2					
K3					
K4					
K5					
K6					
K7					
K8					
K9					
K10					
K11					
K12	↓	↓			
Q1	1006759	TRANSISTOR			
Q2					
Q3					
Q4					
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Q22					
Q23					
Q24	↓	↓			

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL	
A	REVISED PER TDRR 00658	3-13-63	R GG	[illegible]
B	REVISED PER TDRR 00821	[illegible]	EC	[illegible]

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
3. NUMBERS SHOWN ADJACENT TO COILS INDICATE NUMBER OF TURNS.

MASTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN [illegible] DATE 1-4-63
CHECKED [illegible] 3-5-63
APPROVAL Albert Hopkins 3-7-63
APPROVAL Eldon C. Hall 3/6/63
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON TEXAS

SCHEMATIC, CURRENT SWITCHING STICK (FOR ERASABLE MEMORY)

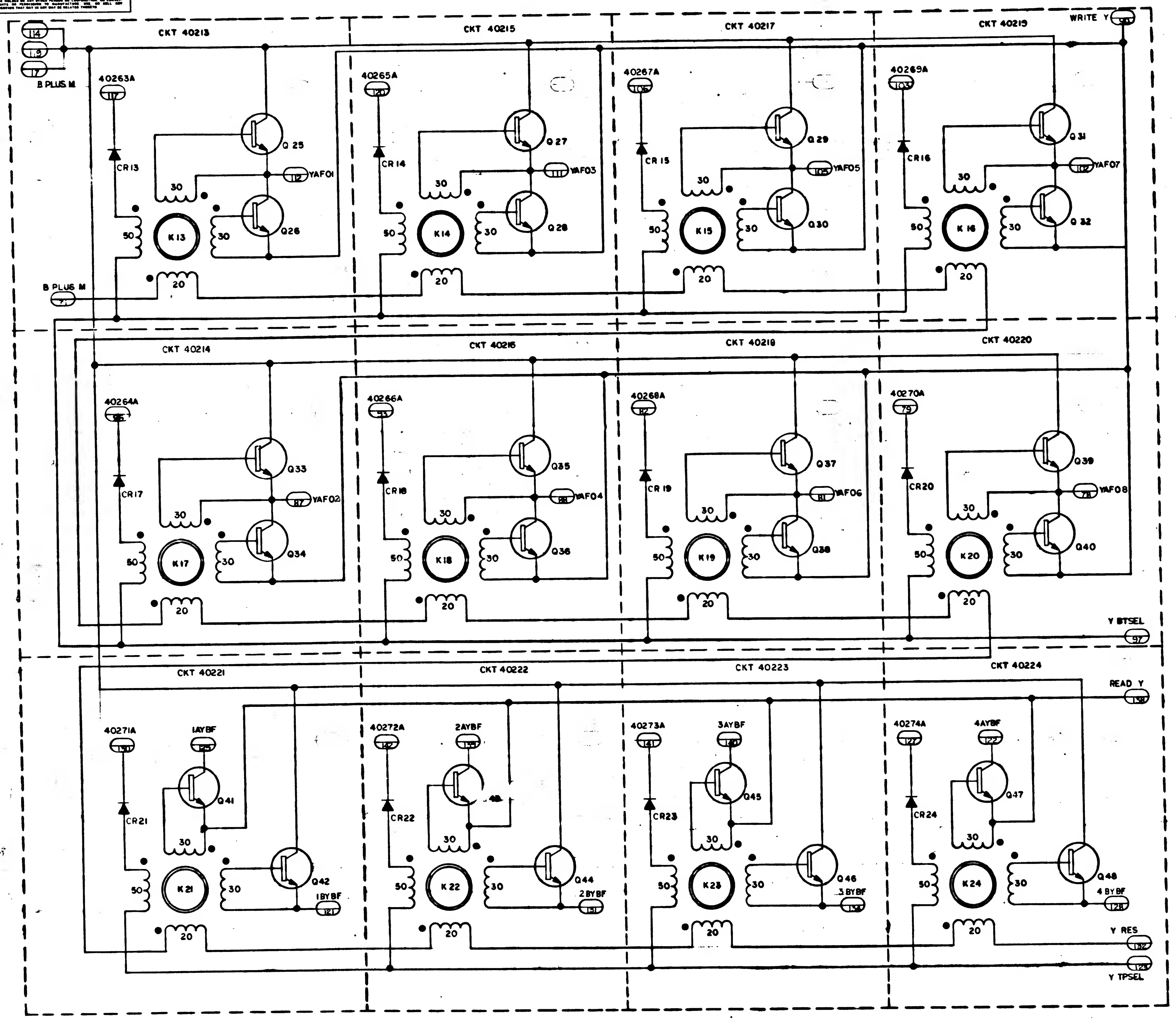
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006074
SCALE #
WT
SHEET 1 OF 2

1006074 A

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00558	3-12-63	ECW WK
B	REVISED PER TDRR 00631		WK



REF DESIG	PART NUMBER	DESCRIPTION	VALUE	TOL	RATING
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CR 14					
CR 15					
CR 16					
CR 17					
CR 18					
CR 19					
CR 20					
CR 21					
CR 22					
CR 23					
CR 24	↓	↓			
K 13	1003084	CORE			
K 14					
K 15					
K 16					
K 17					
K 18					
K 19					
K 20					
K 21					
K 22					
K 23					
K 24	↓	↓			
Q 25	1006759	TRANSISTOR			
Q 26					
Q 27					
Q 28					
Q 29					
Q 30					
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Q 32					
Q 33					
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Q 35					
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Q 39					
Q 40					
Q 41					
Q 42					
Q 43					
Q 44					
Q 45					
Q 46					
Q 47					
Q 48	↓	↓			

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH
3. NUMBERS SHOWN ADJACENT TO COILS INDICATE NUMBER OF TURNS

MASTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 2-6-63
CHECKED 3-5-63
APPROVAL Albert Hopkins 3-5-63
APPROVAL
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CURRENT SWITCHING STICK
(FOR ERASABLE MEMORY)

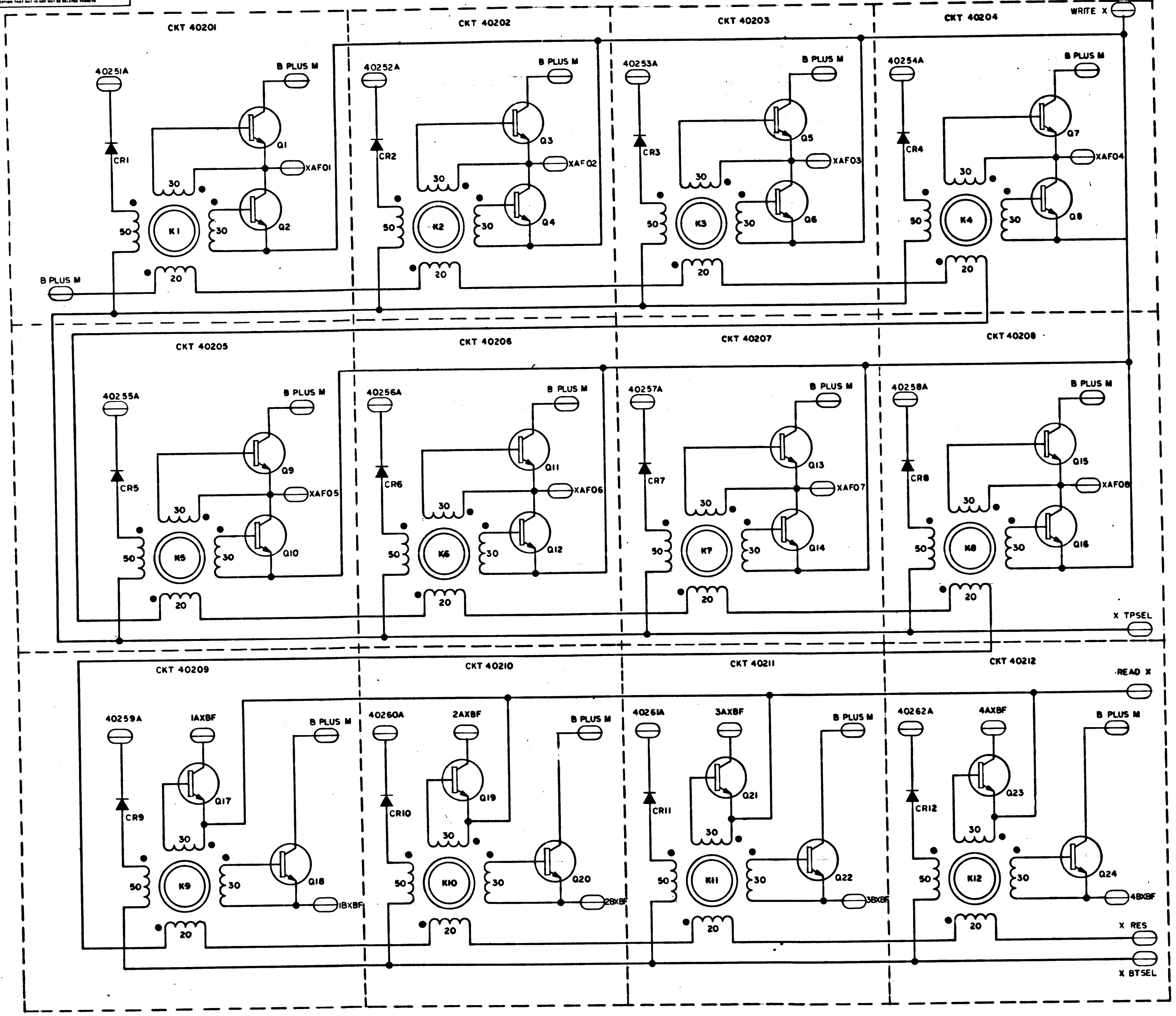
CODE IDENT NO
SIZE E
NASA DRAWING NO 1006074
SCALE — WT SHEET 2 OF 2

1006074 A

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



REF DESIG	PART NUMBER	DESCRIPTION	VALUE	TOL	RATING
CR1	1006751	DIODE			
CR2					
CR3					
CR4					
CR5					
CR6					
CR7					
CR8					
CR9					
CR10					
CR11					
CR12	↓	↓			
K1		CORE			
K2					
K3					
K4					
K5					
K6					
K7					
K8					
K9					
K10					
K11					
K12		↓			
Q1	1006759	TRANSISTOR			
Q2					
Q3					
Q4					
Q5					
Q6					
Q7					
Q8					
Q9					
Q10					
Q11					
Q12					
Q13					
Q14					
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Q16					
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Q19					
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Q21					
Q22					
Q23					
Q24	↓	↓			

FOR INFORMATION ONLY
CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX THEM WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH.
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MASTER

1006074

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

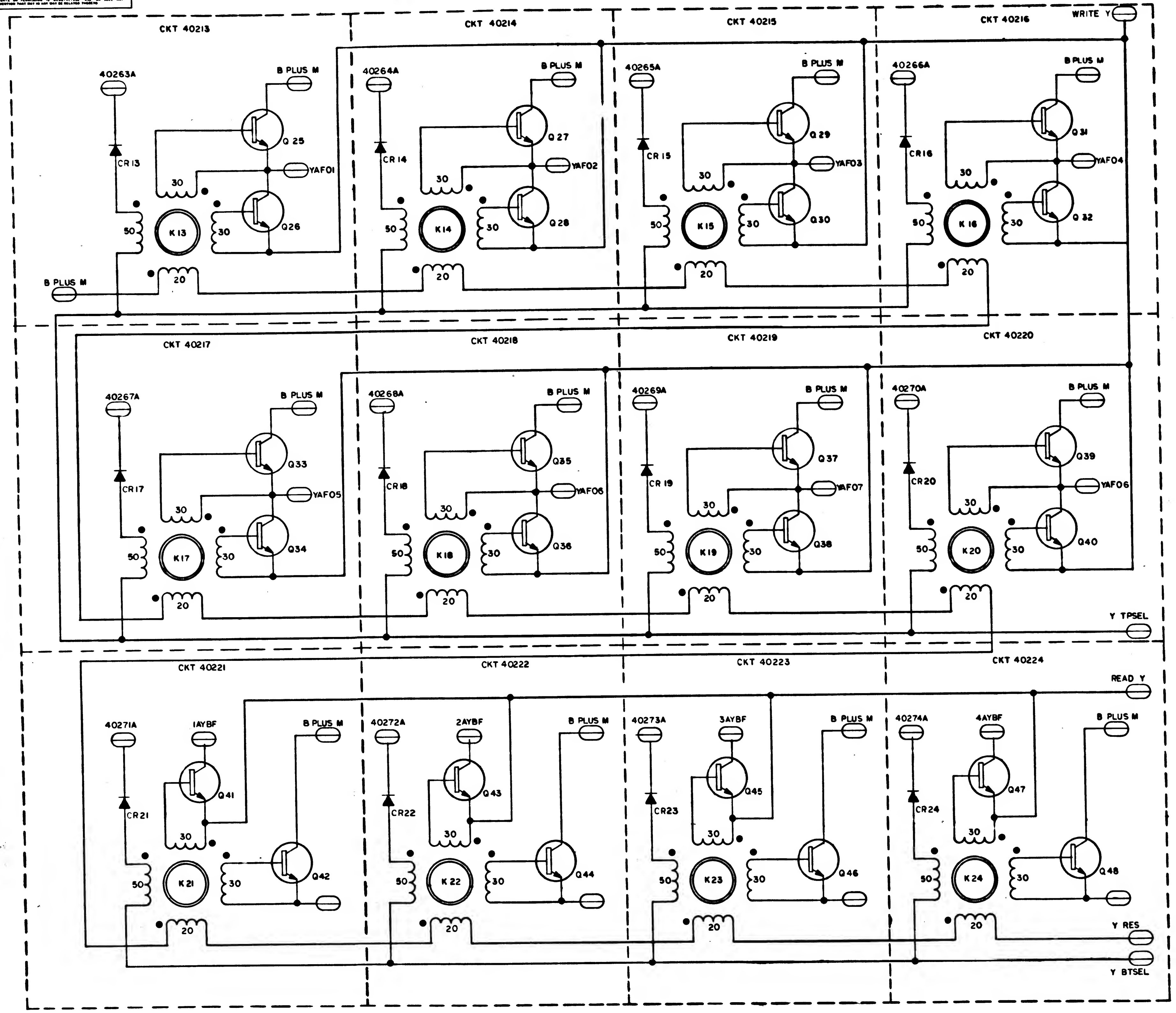
MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG OR CONTRACT
DRAWN Ken Healy DATE 1-8-63
CHECKED [illegible] 3-5-63
APPROVAL Albert Hopkins 3-5-63
APPROVAL Eldon C Hall 3/6/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CURRENT SWITCHING STICK
(FOR ERASABLE MEMORY)

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006074
SCALE # | WT | SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO



REF DESIG	PART NUMBER	DESCRIPTION	VALUE	TOL	RATING
CR 13	1006751	DIODE			
CR 14					
CR 15					
CR 16					
CR 17					
CR 18					
CR 19					
CR 20					
CR 21					
CR 22					
CR 23					
CR 24	↓	↓			
K 13		CORE			
K 14					
K 15					
K 16					
K 17					
K 18					
K 19					
K 20					
K 21					
K 22					
K 23					
K 24		↓			
Q 25	1006759	TRANSISTOR			
Q 26					
Q 27					
Q 28					
Q 29					
Q 30					
Q 31					
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Q 41					
Q 42					
Q 43					
Q 44					
Q 45					
Q 46					
Q 47					
Q 48	↓	↓			

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
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FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 2/13/63
CHECKED 3-5-63
APPROVAL Albert Hopkins 3-5-63
APPROVAL
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

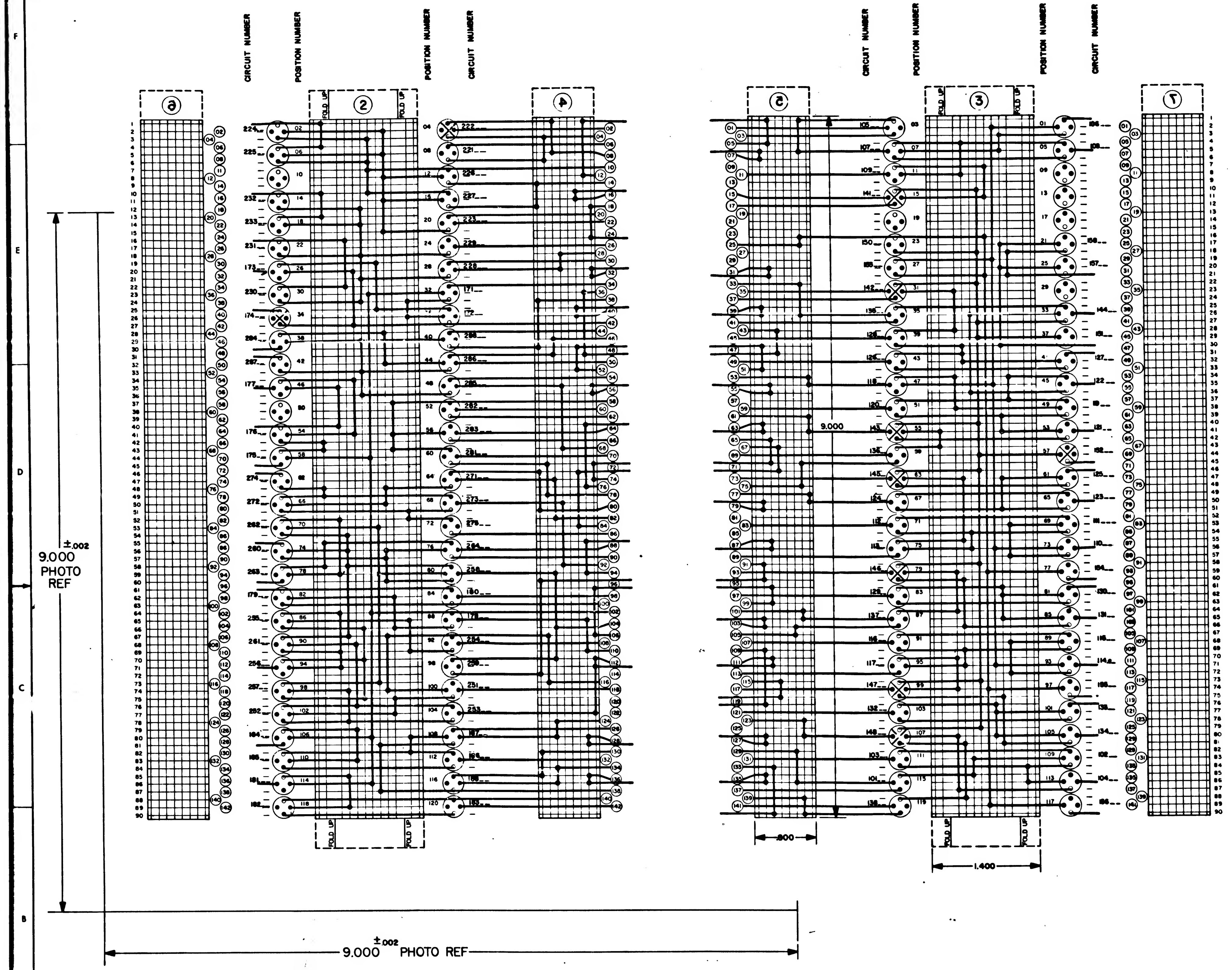
SCHEMATIC, CURRENT SWITCHING STICK (FOR ERASABLE MEMORY)

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006074
SCALE —
WT
SHEET 2 OF 2

1006074

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY
CLASS B RELEASE TDR No. 00514 DATE 6 Mar 63

NOTES-
1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2- ORIGINAL OF THIS DRAWING OR REPRODUCTION MADE BY PROCESS OR METHOD SHALL INSURE DIMENSIONAL STABILITY. DIMENSIONAL VARIATIONS SHALL NOT EXCEED .001 INCH PER INCH
3- MAKE MASTER PATTERN POSITIVE FILMS TO DIMENSIONS SHOWN
4- CUT TO WITHIN .010 OF TRIMLINE
5- MATERIAL- .007 THICK PLASTIC SHEETS, SENSITIZED, DIMENSIONALLY STABLE PER L-P-00518 (NAVY-AER) TYPE II, CLASS C
6- ⊗ DENOTES "OR CIRCUIT" (+3VDC LEAD NOT CONNECTED).

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 5
HEAT TREATMENT —
FINAL FINISH —

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN Mahoney DATE 2-7-63
CHECKED 3/5/63
APPROVAL
APPROVAL 3/6/63
NASA APPROVAL
MIT APPROVAL 6 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

ARITHMETIC STICK NO.(-16
WIRING DIAGRAM

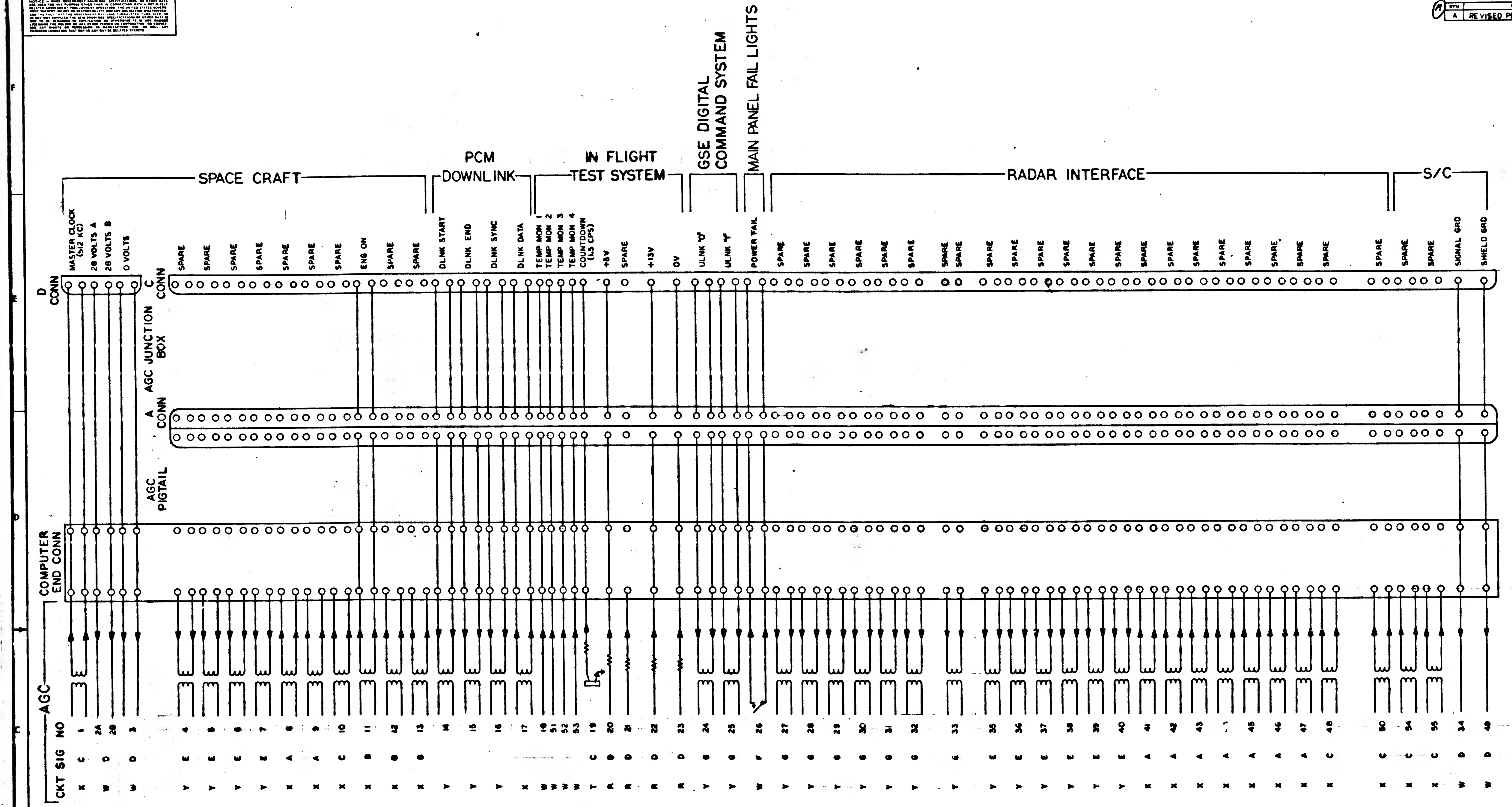
CODE IDENT NO
SIZE E
NASA DRAWING NO 1006075
SCALE 2/1
WT
SHEET 1 OF 1

1006075

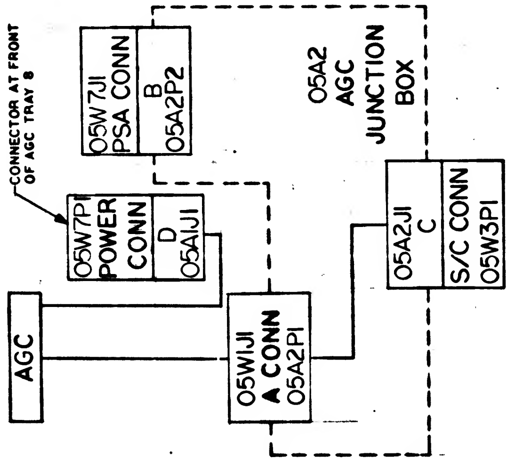
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00827	10 Jan 63	


SPACE CRAFT
PCM DOWNLINK
IN FLIGHT TEST SYSTEM
GSE DIGITAL COMMAND SYSTEM
MAIN PANEL FAIL LIGHTS
RADAR INTERFACE
S/C
MASTER CLOCK (512 KC)
28 VOLTS A
28 VOLTS B
0 VOLTS
SPARE
ENG ON
DLNK START
DLNK END
DLNK SYNC
DLNK DATA
TEMP MON 1
TEMP MON 2
TEMP MON 3
TEMP MON 4
COUNTDOWN (1.5 CPS)
+3V
+13V
0V
ULNK "0"
ULNK "1"
POWER FAIL
SIGNAL GRD
SHIELD GRD
D CONN
C CONN
AGC JUNCTION BOX
A CONN
AGC PIGTAIL
COMPUTER END CONN
AGC
NO
SIG
CKT
1 2A 2B 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 51 52 53 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 35 36 37 38 39 40 41 42 43 44 45 46 47 48 50 54 55 34 49
C D D E E E E A A C B B B C B D D D G G F B B B B B G G E E E E E E E A A A A A A A C C C C D D
X W W Y Y Y Y X X X X X X Y Y Y X W W W W T R R R R Y Y W Y Y Y Y Y Y Y Y Y Y Y Y Y X X X X X X X X X X X W W

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE	DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	D. C.
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —/—
DECIMALS ± —/—
ANGLES ± —/—
DO NOT SCALE THIS DRAWING
MATERIAL —/—
HEAT TREATMENT —/—
FINAL FINISH —/—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN J. Falzano DATE 12 MAR 63
CHECKED N. [illegible] 4/1/63
APPROVAL Donald Boots 4/4/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO SPACECRAFT

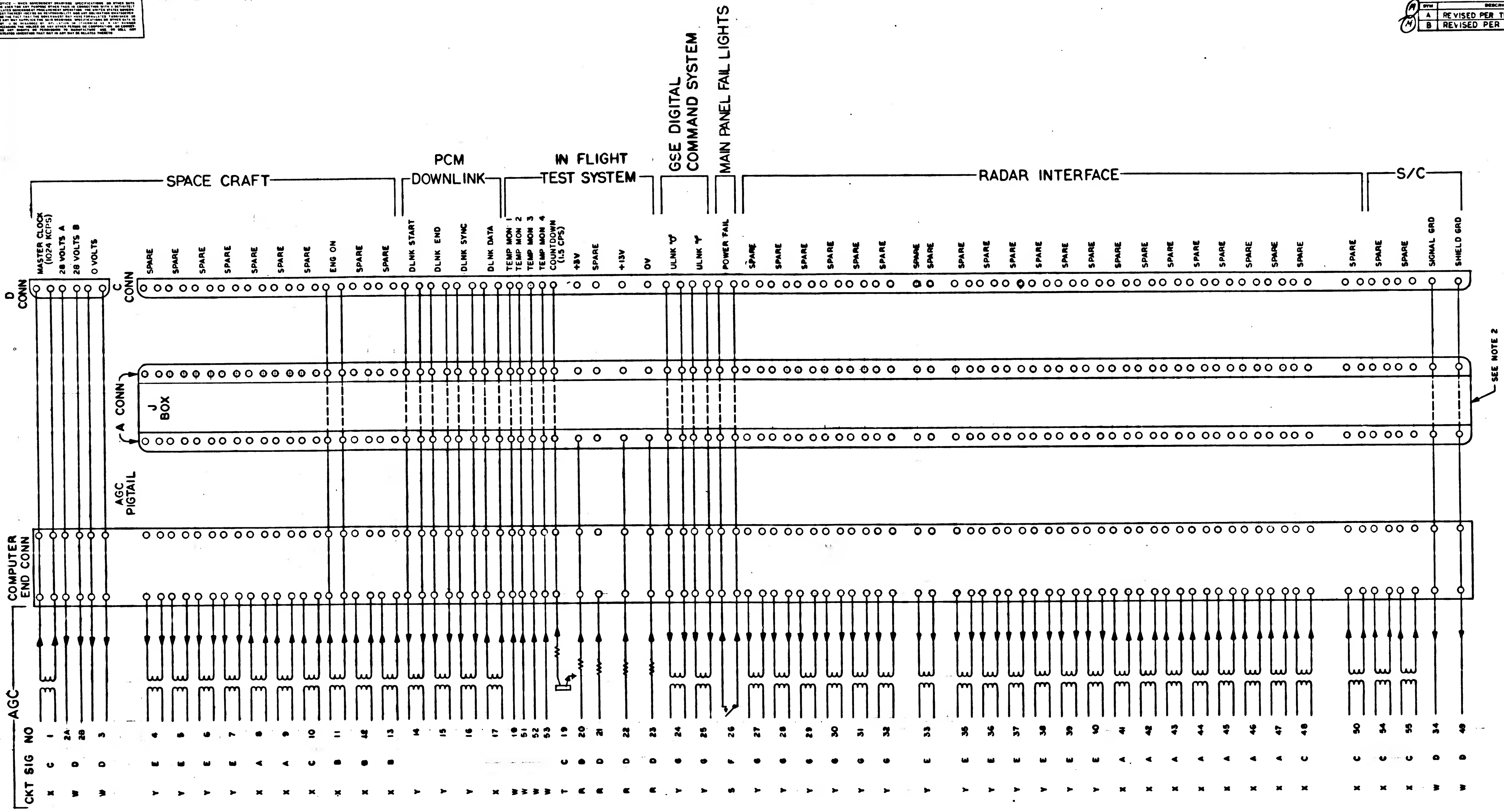
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006076
SCALE —/—
WT
SHEET 1 OF 1

E 1006076 A

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

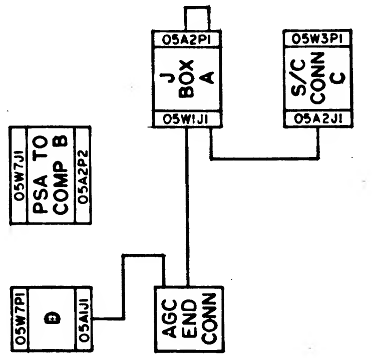
	REVISIONS TDRR 00737		
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00827	10 Jun 63	wll
B	REVISED PER TDRR 01562	6.12.63	[illegible]


SPACE CRAFT
PCM DOWNLINK
IN FLIGHT TEST SYSTEM
GSE DIGITAL COMMAND SYSTEM
MAIN PANEL FAIL LIGHTS
RADAR INTERFACE
S/C
MASTER CLOCK (1024 KCPS)
28 VOLTS A
28 VOLTS B
0 VOLTS
SPARE
ENG ON
DLNK START
DLNK END
DLNK SYNC
DLNK DATA
TEMP MON 1
TEMP MON 2
TEMP MON 3
TEMP MON 4
COUNTDOWN (1.5 CPS)
+8V
+13V
0V
ULNK 'O'
ULNK 'I'
POWER FAIL
SIGNAL GRD
SHIELD GRD
D CONN
C CONN
A CONN
J BOX
AGC PIGTAIL
COMPUTER END CONN
SEE NOTE 2
AGC
NO
CKT SIG
1 2A 2B 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 51 52 53 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 35 36 37 38 39 40 41 42 43 44 45 46 47 48 50 54 55 34 49
C D D E E E E A A C B B B C B D D D G G F G G G G G G G E E E E E E E A A A A A A A C C C C D D
X W W Y Y Y Y X X X X X X Y Y Y X W W W W T R R R R Y Y S Y Y Y Y Y Y Y Y Y Y Y Y Y X X X X X X X X X X X W W

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. THE JUNCTION BOX MAKES THE INTERCONNECTIONS BETWEEN THE TWO SIDES OF THE "A" CONNECTOR AS SHOWN. THE PINS ON BOTH SIDES OF THE "A" CONNECTOR ARE CONTAINED IN 05W1J1

E



	CIRCUIT TYPE	DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	D.C.
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

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DO NOT SCALE THIS DRAWING
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HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN J. Falzone DATE 12 MAR 63
CHECKED N. Elson 4/1/63
APPROVAL Donald Bowler 4/1/63
APPROVAL Ed. C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 April 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO SPACECRAFT

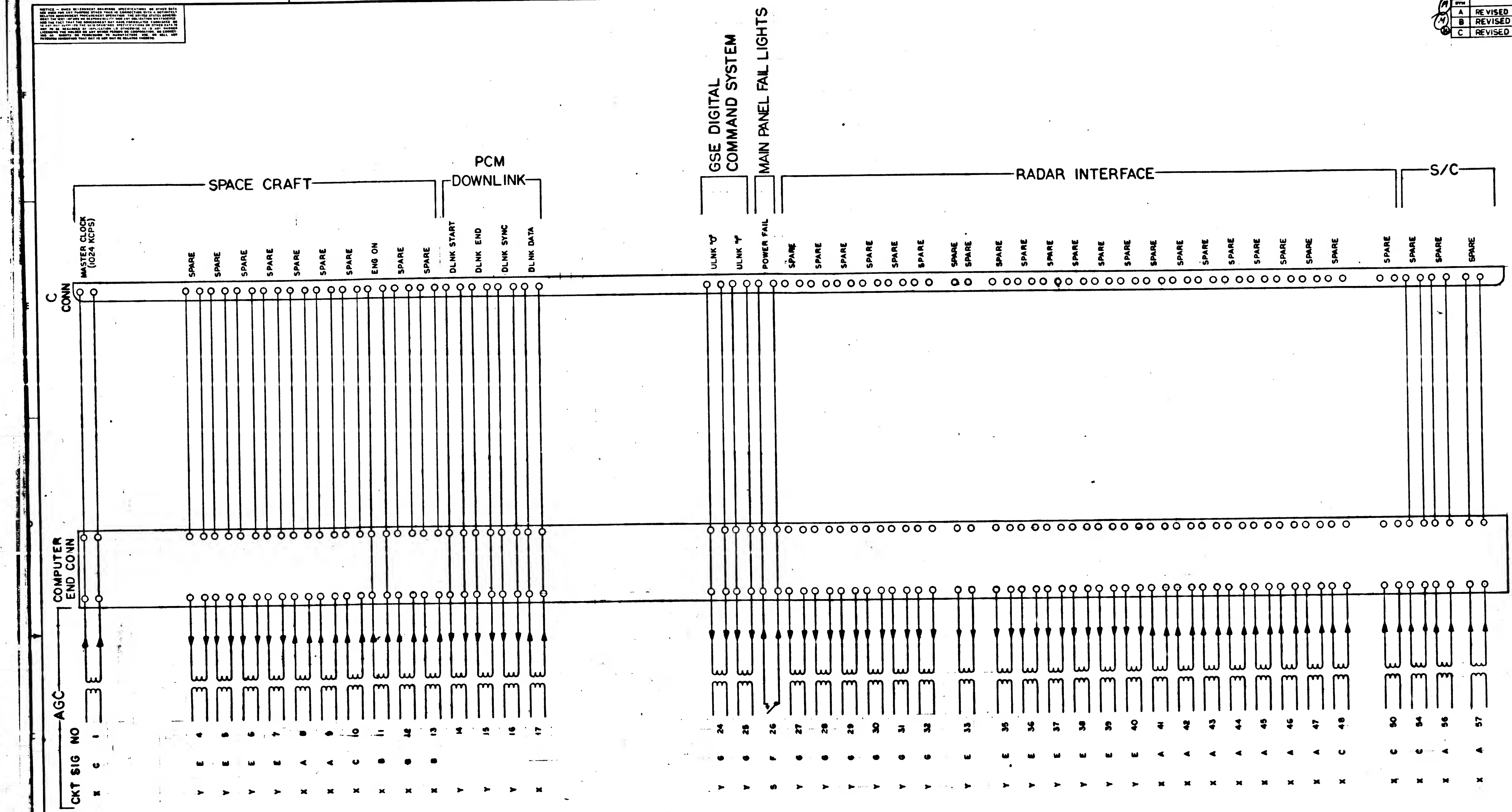
CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006076
SCALE — | WT | SHEET 1 OF 1

E 1006076 B

INCHES
PHOTOGRAPHIC SCALE ONLY

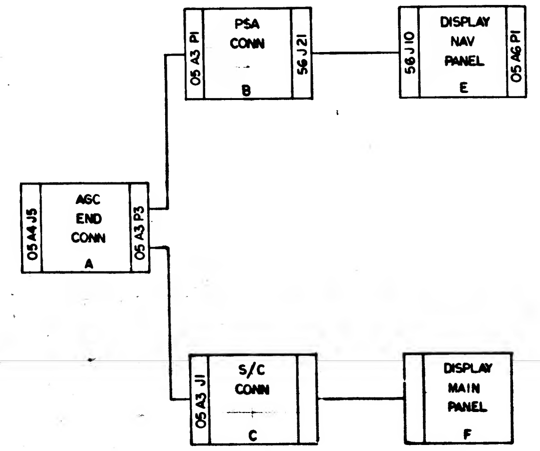
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00827	[illegible]-63	[illegible]
B	REVISED PER TDRR 01566	5-12-63	[illegible]
C	REVISED PER TDRR 02111	9-2-63	[illegible]

REVISIONS TDRR 00737


SPACE CRAFT
PCM DOWNLINK
GSE DIGITAL COMMAND SYSTEM
MAIN PANEL FAIL LIGHTS
RADAR INTERFACE
S/C
MASTER CLOCK (1024 KCPS)
SPARE
ENG ON
DLNK START
DLNK END
DLNK SYNC
DLNK DATA
ULNK '0'
ULNK '1'
POWER FAIL
C CONN
COMPUTER END CONN
AGC
NO: 1 4 5 6 7 8 9 10 11 12 13 14 15 16 17 24 25 26 27 28 29 30 31 32 33 35 36 37 38 39 40 41 42 43 44 45 46 47 48 50 54 56 57
SIG: G E E E E A A C B B B G G F G G G G G G E E E E E E E A A A A A A A C C C A A
CKT: X Y Y Y Y X X X X X X Y Y Y X Y Y S Y Y Y Y Y Y Y Y Y Y Y Y Y X X X X X X X X X X X X

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



CIRCUIT TYPE		DRAWING NO.
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S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE	
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	D.C.
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —
DECIMALS ± —
ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN J. Falzano DATE 12 MAR 63
CHECKED N. [illegible] 4/1/63
APPROVAL Donald [illegible] 4/4/63
APPROVAL [illegible] C Hall 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO SPACECRAFT

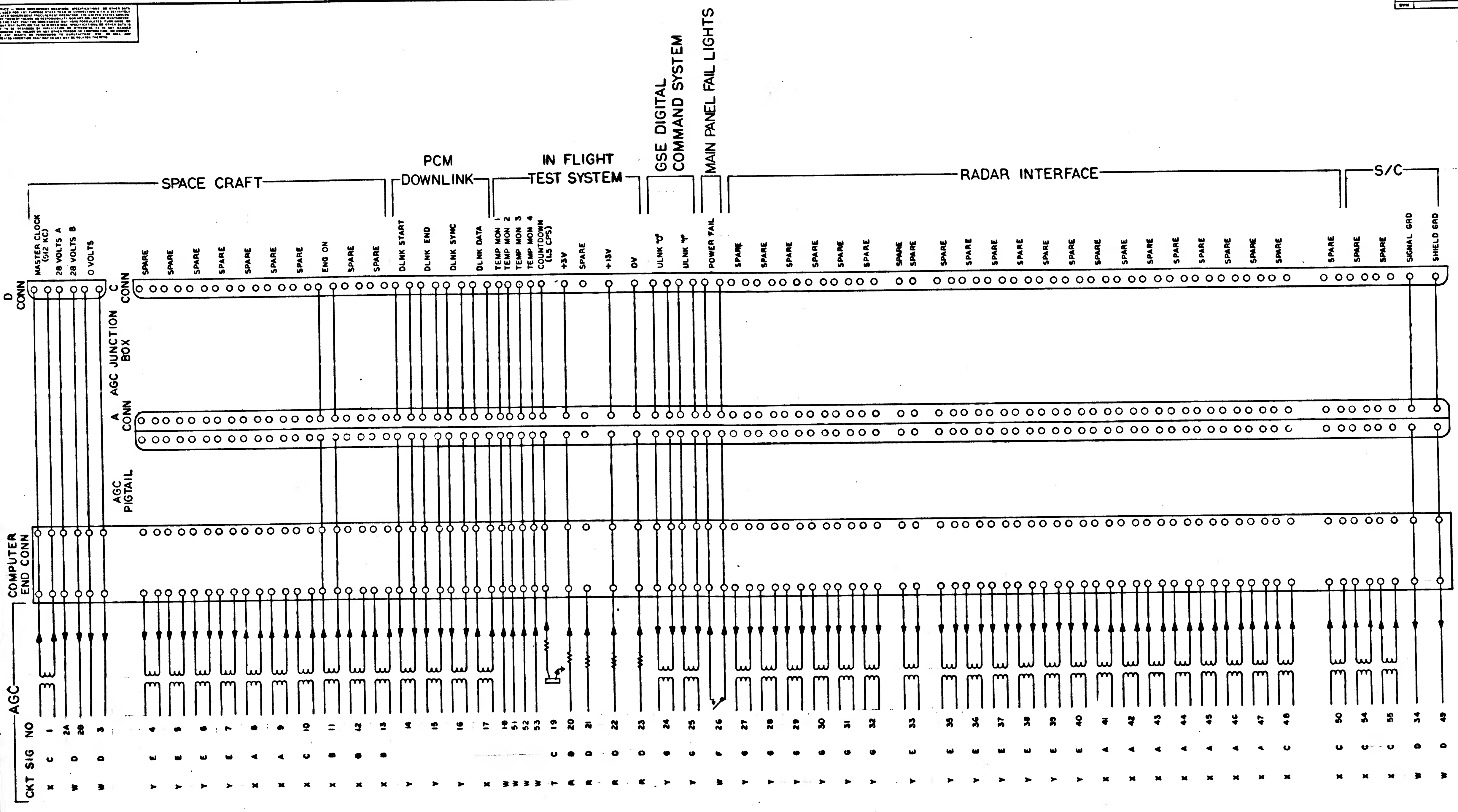
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006076
SCALE —
WT
SHEET 1 OF 1

E 1006076 C

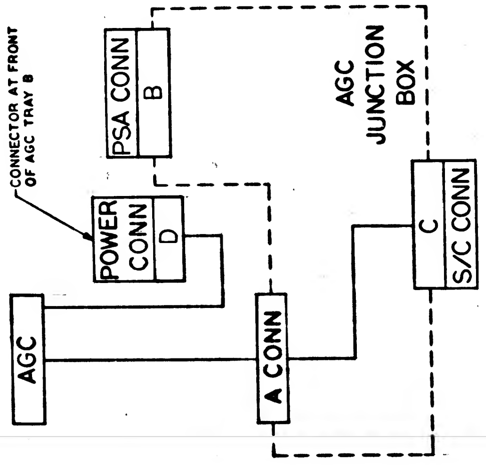
INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00737			
SYM	DESCRIPTION	DATE	APPROVAL



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



CIRCUIT TYPE

	CIRCUIT TYPE	DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	D.C.
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN J. Falzano DATE 12 MAR 63
CHECKED 4/1/63
APPROVAL Donald Booth 4/4/63
APPROVAL Ed C Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO SPACECRAFT

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006076
SCALE WT SHEET 1 OF 1

E 1006076

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE: WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDER 00737

SYM	DESCRIPTION	DATE	APPROVAL
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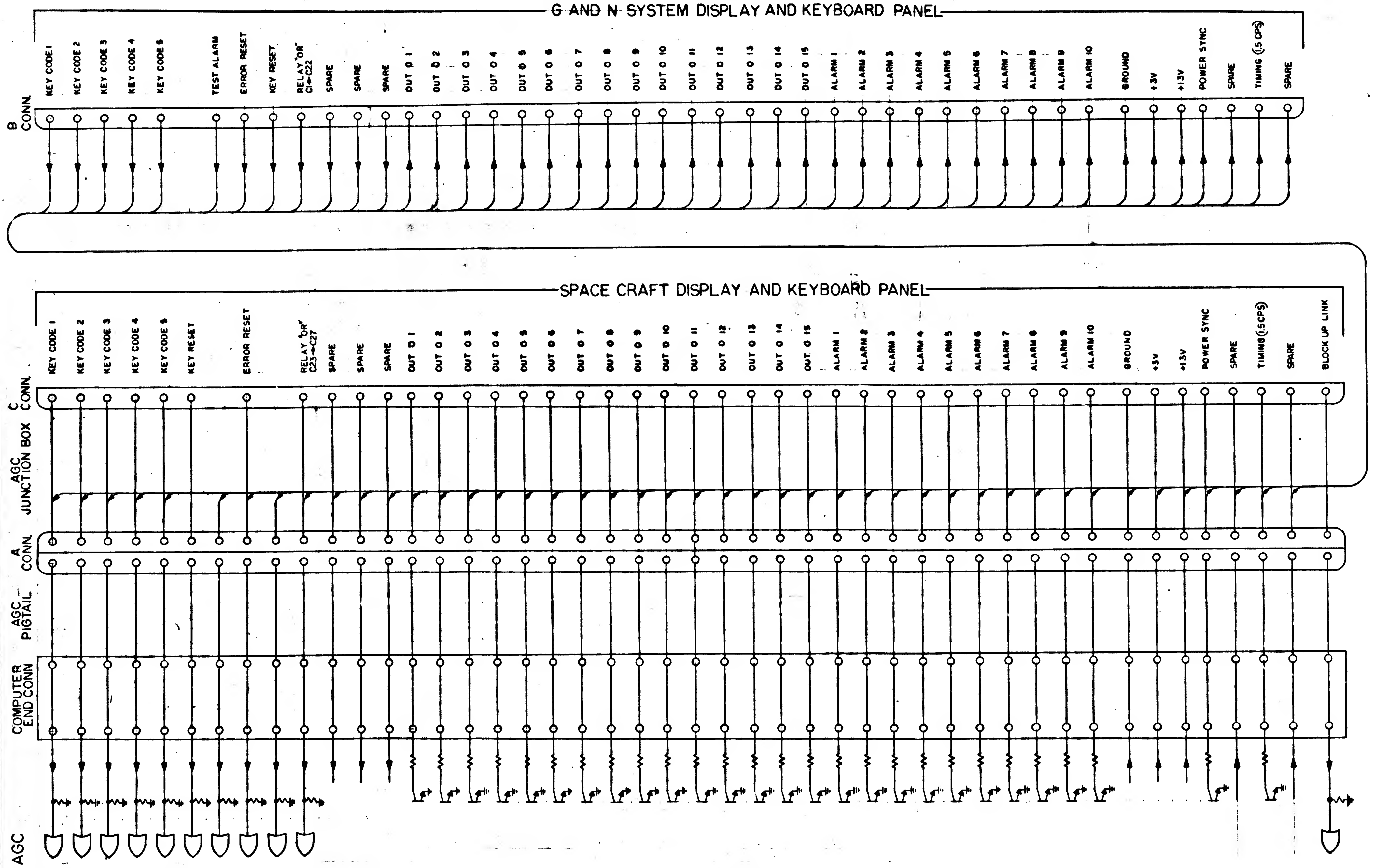

NO.	SIG.	CKT.
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203	E	K
204	E	K
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236		T
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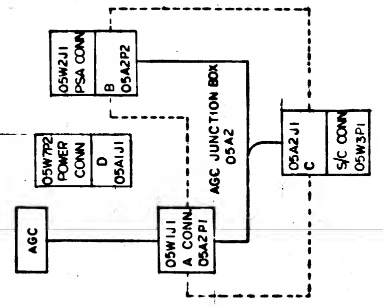
242	C	T
243		W
244	C	T
245		W
246	E	K

CIRCUIT TYPE		DRAWING NO
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE
A CONTROLLED RATE
B DISCRETE RATE
C FIXED FREQUENCY
D DC
E OUT BITS/IN BITS
F ALARM DETECTION
G COUNTER

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN E. O'Connell DATE 3-12-63
CHECKED K.C. Brown 4/1/63
APPROVAL Donald J. Barker 4/1/63
APPROVAL Ellen C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO DSKY

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006077
SCALE
WT
SHEET 1 OF 1

1006077 A

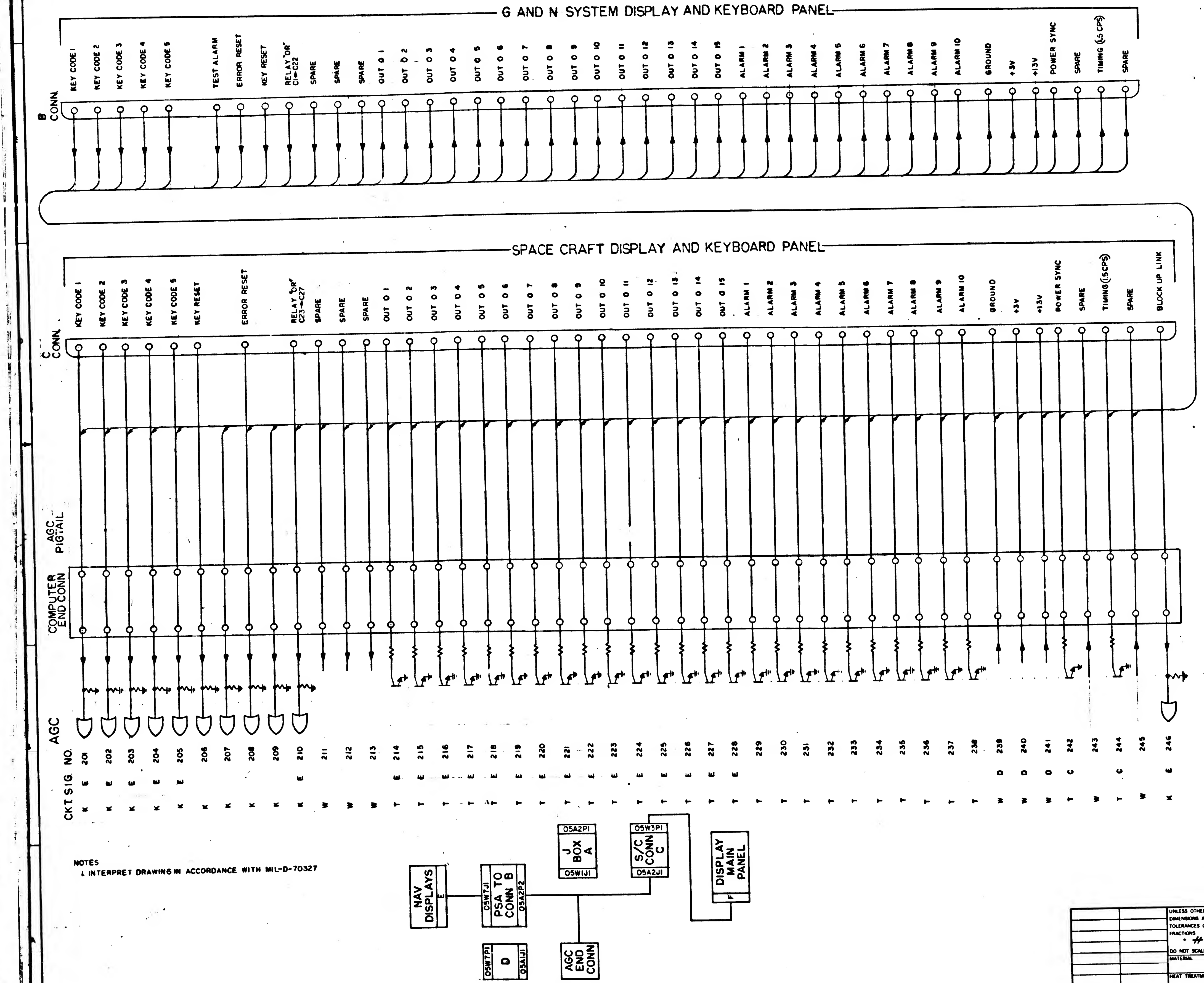
MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

[illegible]

REVISIONS TDER 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00825	10 Jun 63	
B	REVISED PER TDRR 01576	7-63	DJB HKB



	CIRCUIT TYPE	DRAWING NO
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE
A CONTROLLED RATE
B DISCRETE RATE
C FIXED FREQUENCY
D DC
E OUT BITS/IN BITS
F ALARM DETECTION
G COUNTER

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO
CONTRACT

DRAWN E. O'Connell DATE 3-2-63
CHECKED K.C. Bowen 4/1/63
APPROVAL Donald J. Bowler 4/1/63
APPROVAL [illegible]
NASA APPROVAL
MIT APPROVAL 3 Jun 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE

AGC TO DSKY

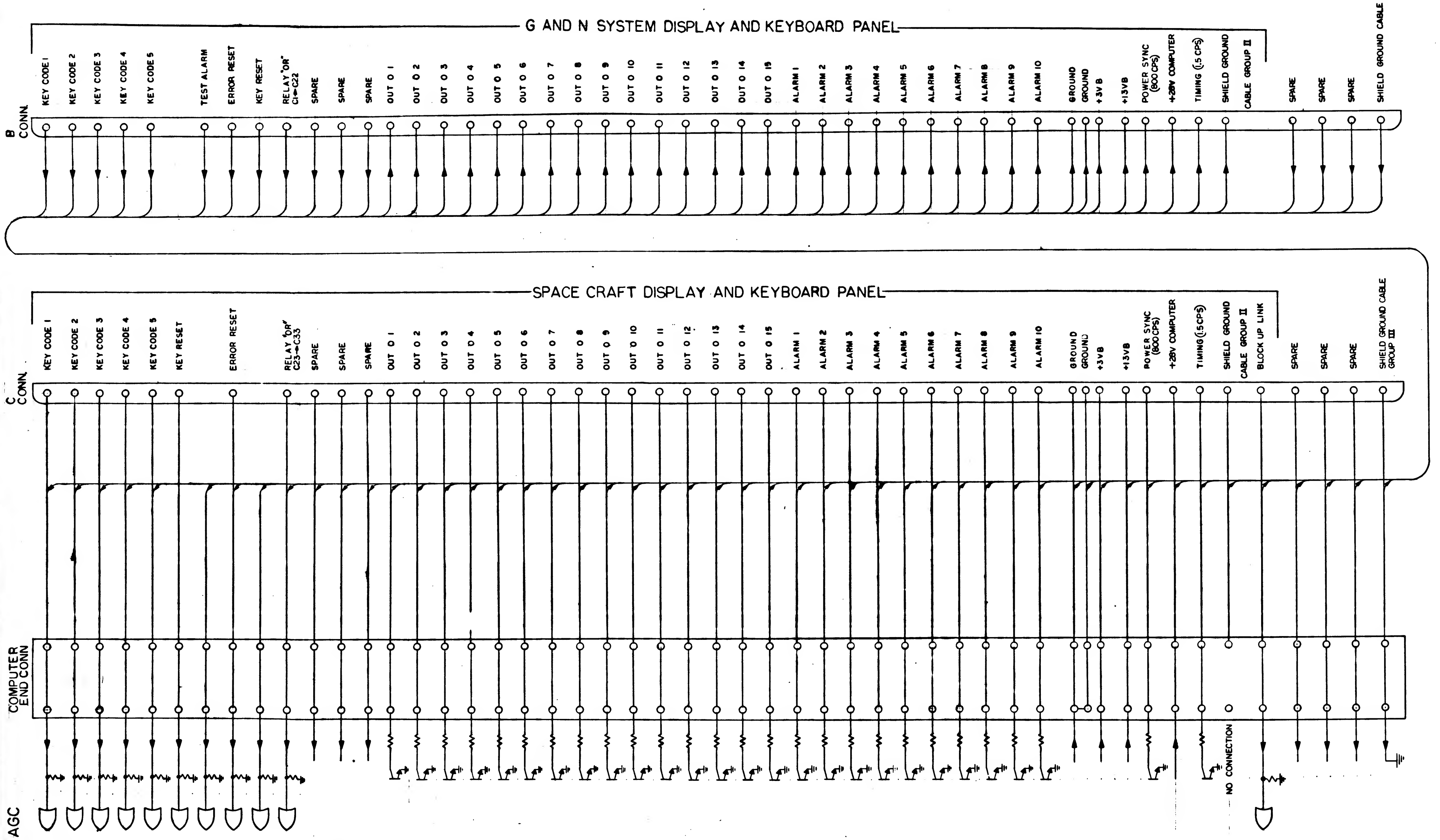
CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006077
SCALE
WT
SHEET 1 OF 1

1006077 B

INCHES
PHOTOGRAPHIC SCALE ONLY

REVISIONS *TDER 00737*

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR *00825*	[illegible] 63	[illegible]
B	REVISED PER TDRR *01576*	*6-12-63*	*DJB*
C	REVISED PER TDRR *03 2*	*[illegible]*	[illegible]



NO.	SIG.	CKT.
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244	C	T
245	D	W
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247		W
248		W
249		W
250	D	W

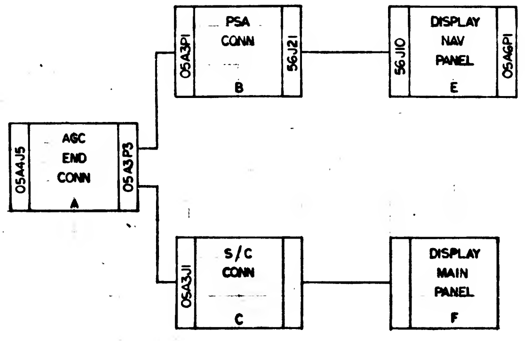
CIRCUIT TYPE

		DRAWING NO
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN *E. O'Connell* DATE *3-12-63*
CHECKED *K.E. Brown 4/1/63*
APPROVAL *Donald J. Barker 4/1/63*
APPROVAL *[illegible] 4/1/63*
NASA APPROVAL
MIT APPROVAL *[illegible] 3 Apr 63*

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO DSKY

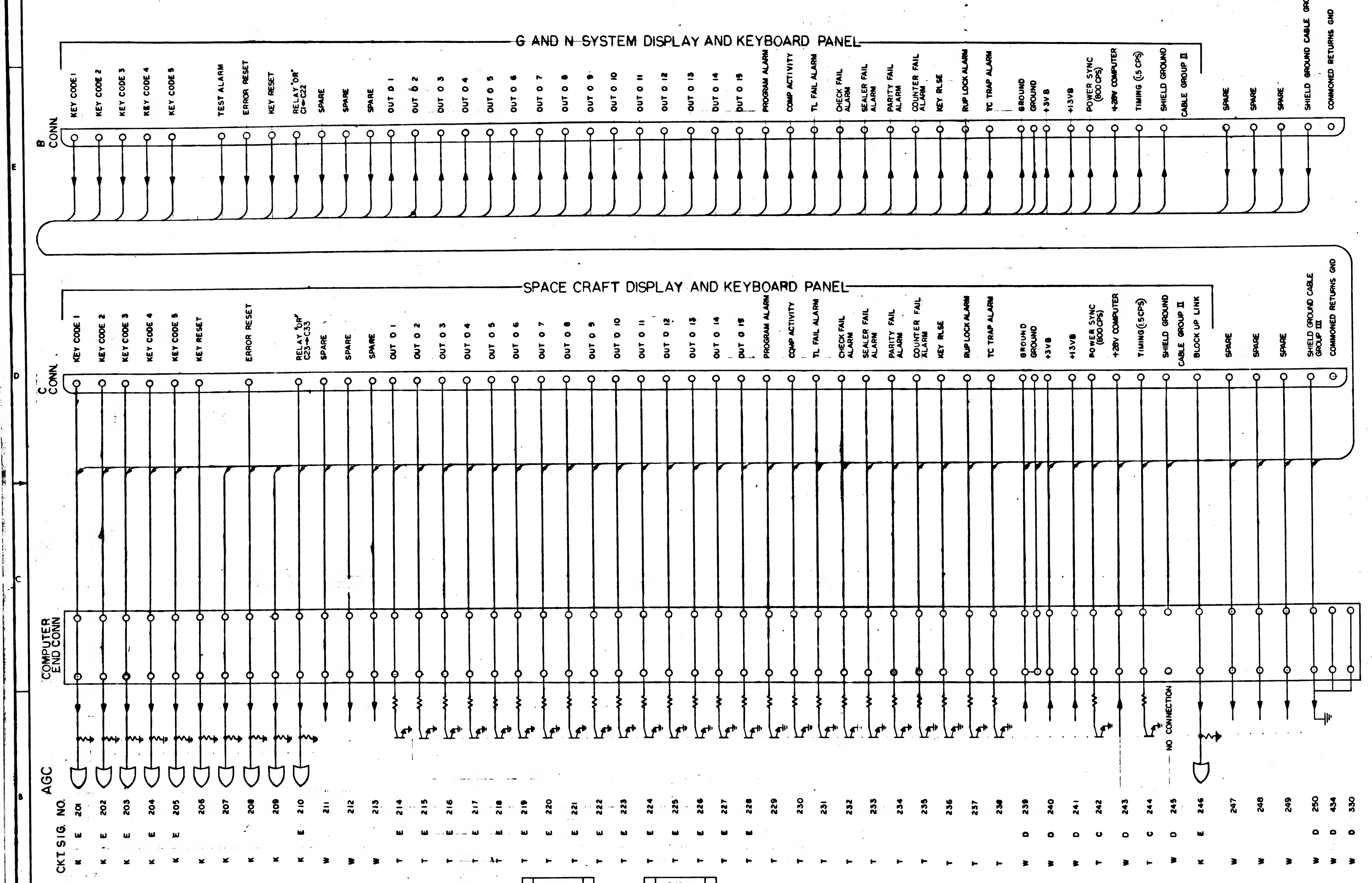
CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006077
SCALE | WT | SHEET / OF /

1006077 C

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00825	[illegible] 63	WR.
B	REVISED PER TDRR 01576	6-12-63	DJB HAB
C	REVISED PER TDRR 03112	3-12-63	RPK WR
D	REVISED PER TDRR 04015	[illegible]-17-63	WR.



NO.	SIG.	CKT
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434	D	W
330	D	W

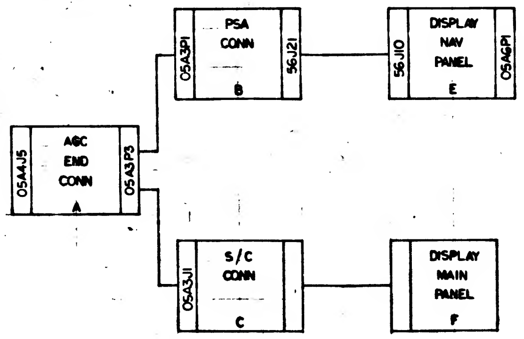
CIRCUIT TYPE

	CIRCUIT TYPE	DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUT BITS/IN BITS
- F ALARM DETECTION
- G COUNTER

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND.



MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO.
CONTRACT
DRAWN E. O'Connell DATE 3-12-63
CHECKED K.C. Brown [illegible]
APPROVAL Donald J. Barker 4/1/63
APPROVAL [illegible] 4/1/63
NASA APPROVAL
MIT APPROVAL [illegible] 3/[illegible]/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO DSKY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006077
SCALE
WT
SHEET 1 OF 1

1006077 D

INCHES
PHOTOGRAPHIC SCALE ONLY

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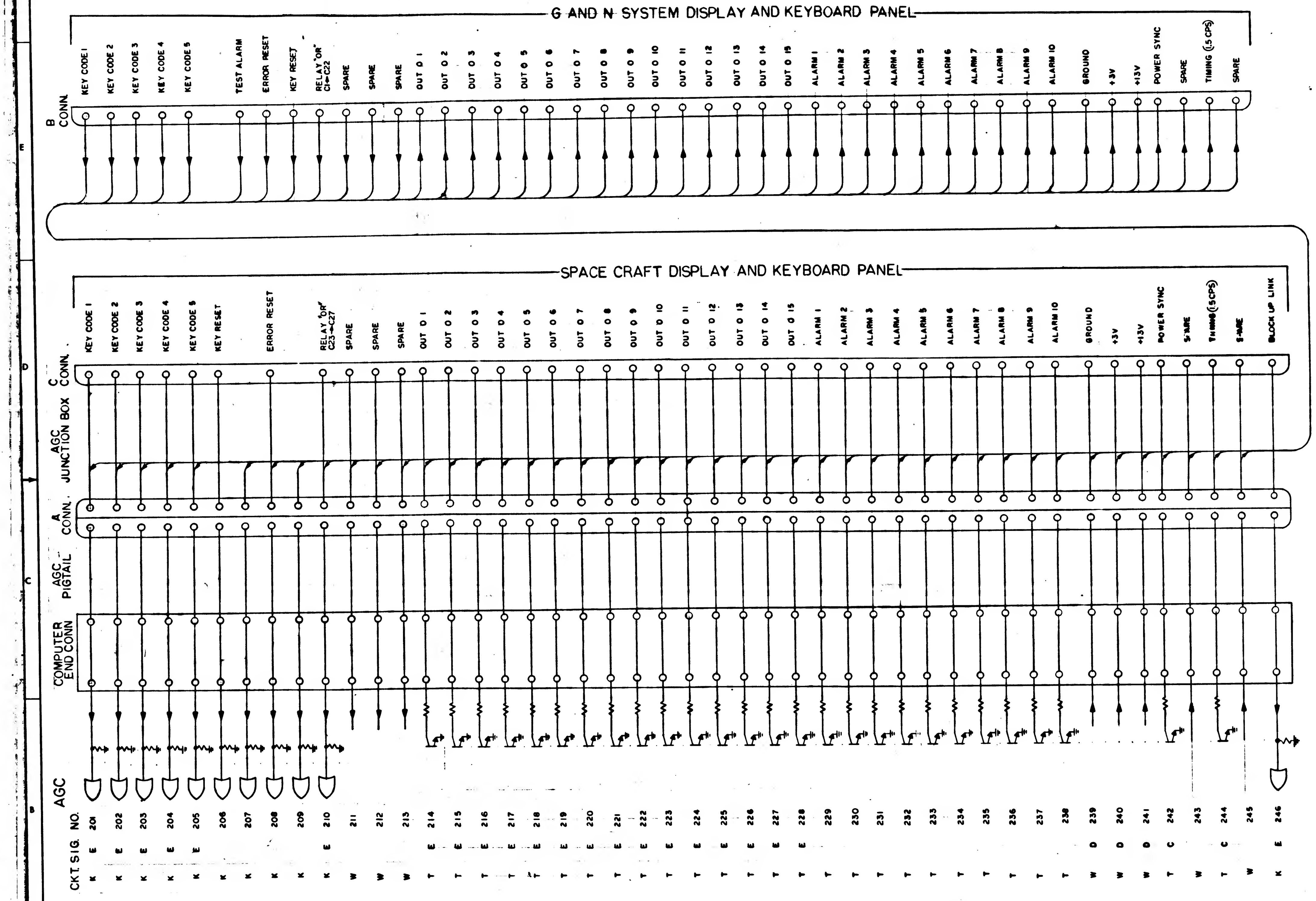
SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS TDER 00737



CKT.	SIG.	NO.
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T		238
W	D	239
W	D	240
W	D	241
T	C	242
W		243
T	C	244
W		245
K	E	246

CIRCUIT TYPE		DRAWING NO
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
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- C FIXED FREQUENCY
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- E OUT BITS/IN BITS
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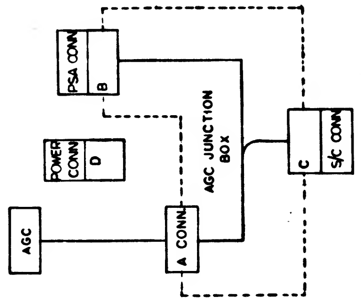
- G COUNTER

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH MIL-D-70327



MASTER

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APPLICATION	

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HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO. CONTRACT
DRAWN E. O'Connell DATE 3-12-63
CHECKED K.E. [illegible] 4/1/63
APPROVAL Donald J. Bowler 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO DSKY

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006077
SCALE | WT | SHEET OF

INCHES
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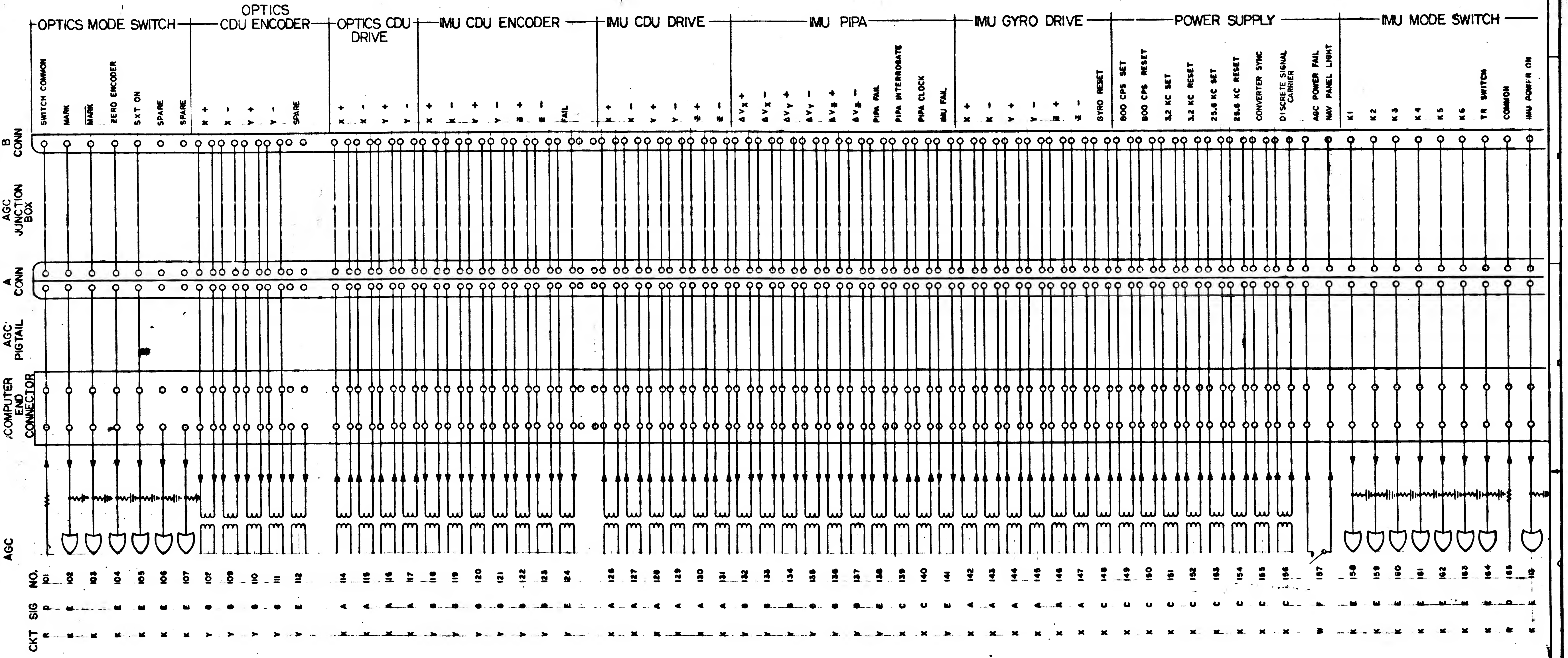
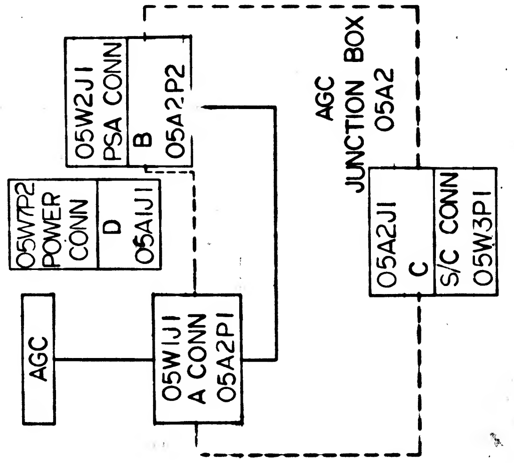
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	REISED PER TDRR 00820		



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUTPUT BITS / INPUT BITS
F	ALARM DETECTION
G	COUNTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

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APPLICATION	

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FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN A. Dampeck DATE 3/12/63
CHECKED K. C. Brown 4/1/63
APPROVAL Donald A. Baylor 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO PSA JUNCTION 30X

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE —
WT
SHEET 1 OF 1

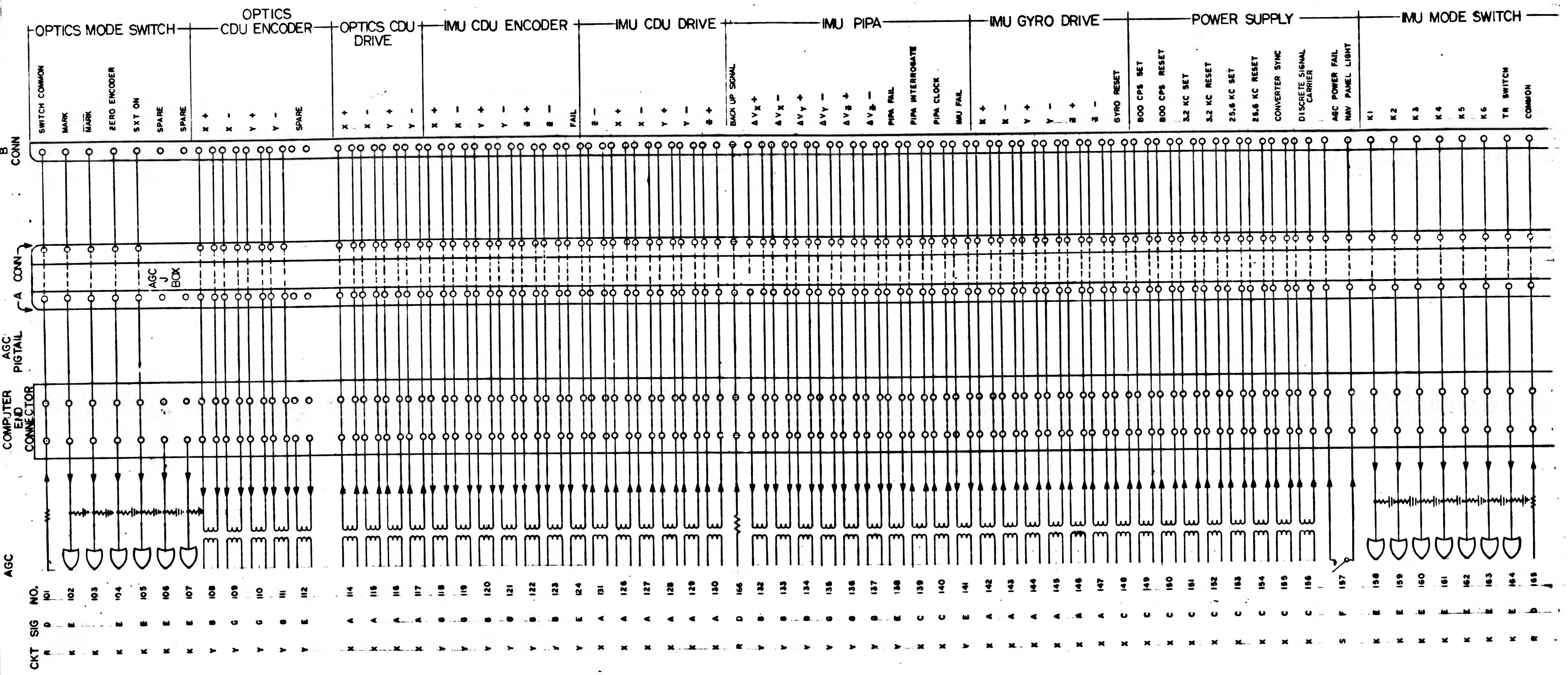
1006078 A

MASTER

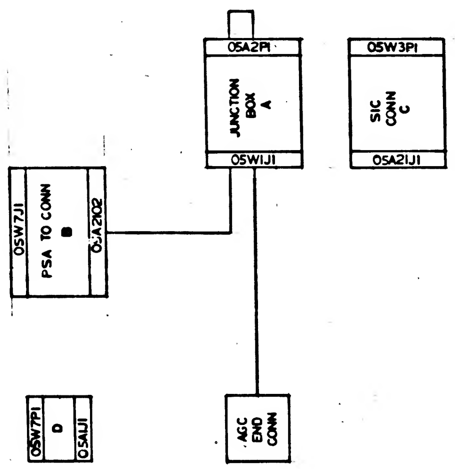
INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	RE SED PER TDRR 00520	10 Apr 63	
B	REVISED PER TDRR 01577	6-12-63	

REVISIONS TDRR 00737



NOTES:
1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

A CONTROLLED RATE
B DISCRETE RATE
C FIXED FREQUENCY
D DC
E OUTPUT BITS/INPUT BITS
F ALARM DETECTION
G COUNTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DRAWN A. Dezyck DATE 3/12/63
CHECKED
APPROVAL Donald L. Bowler 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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HOUSTON, TEXAS

AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006078
SCALE — WT SHEET 1 OF 1

1006078 B

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INCHES
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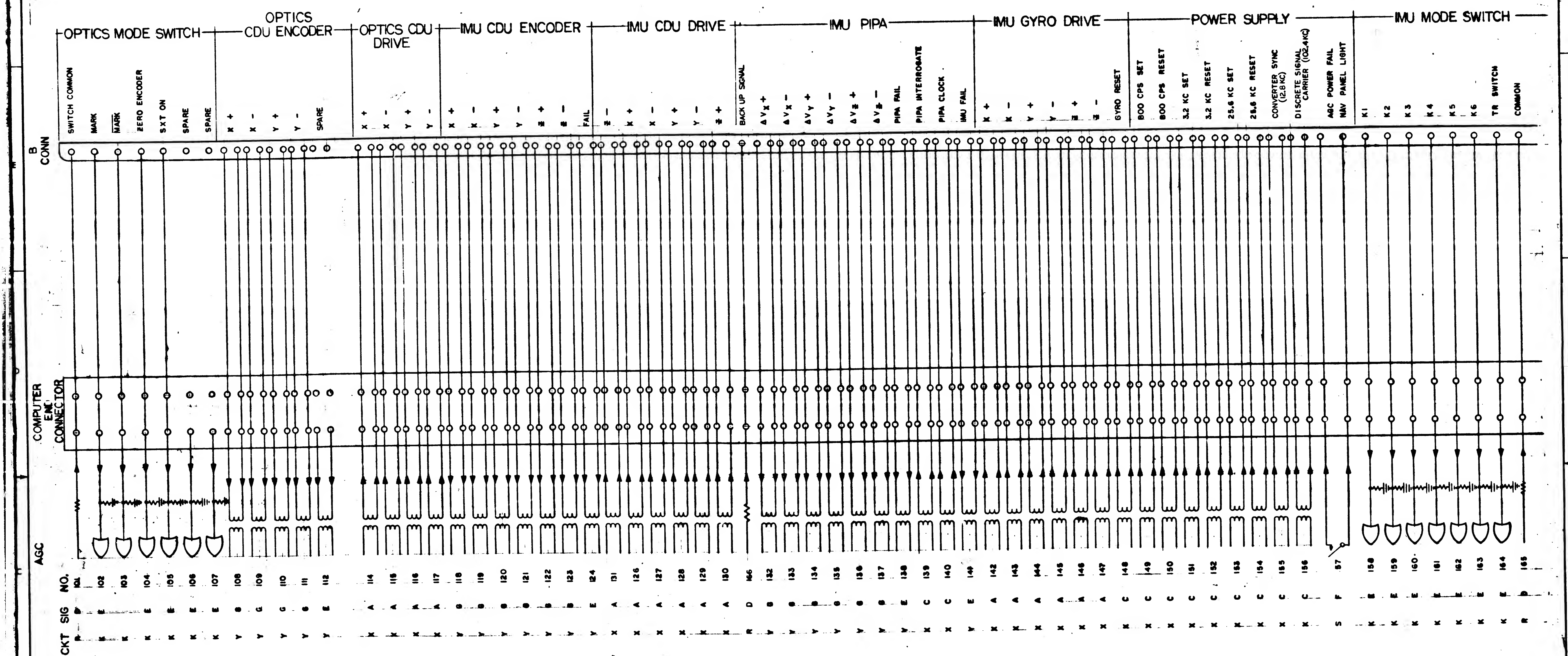
REVISIONS TO CC 00737			
SYM	DESCRIPTION	DATE	APPROVAL
A	RE SED PER TDRR 00820	16 Apr 63	
B	REVISED PER TDRR 01577	6-18-63	038
C	REVISED PER TDRR 03113	8-2-63	


OPTICS MODE SWITCH
SWITCH COMMON
MARK
MARK
ZERO ENCODER
SXT ON
SPARE
SPARE
OPTICS CDU ENCODER
X +
X -
Y +
Y -
SPARE
OPTICS CDU DRIVE
X +
X -
Y +
Y -
IMU CDU ENCODER
X +
X -
Y +
Y -
Z +
Z -
FAIL
IMU CDU DRIVE
Z -
X +
X -
Y +
Y -
Z +
IMU PIPA
BACK UP SIGNAL
ΔVx +
ΔVx -
ΔVy +
ΔVy -
ΔVz +
ΔVz -
PIPA FAIL
PIPA INTERROGATE
PIPA CLOCK
IMU FAIL
IMU GYRO DRIVE
X +
X -
Y +
Y -
Z +
Z -
GYRO RESET
POWER SUPPLY
800 CPS SET
800 CPS RESET
3.2 KC SET
3.2 KC RESET
25.6 KC SET
25.6 KC RESET
CONVERTER SYNC (12.8 KC)
DISCRETE SIGNAL CARRIER (102.4 KC)
AGC POWER FAIL
NAV PANEL LIGHT
IMU MODE SWITCH
K1
K2
K3
K4
K5
K6
TR SWITCH
COMMON
B CONN
COMPUTER END CONNECTOR
AGC
NO. 101 102 103 104 105 106 107 108 109 110 111 112 114 115 116 117 118 119 120 121 122 123 124 131 126 127 128 129 130 166 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 57 158 159 160 161 162 163 164 165
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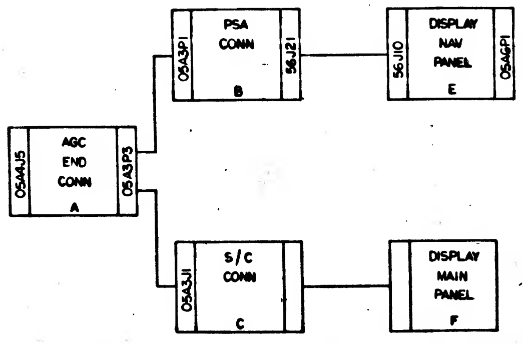
NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUTPUT BITS / INPUT BITS
F	ALARM DETECTION
G	COUNTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN A. Dzygadlo DATE 3/12/63
CHECKED
APPROVAL Donald J. Bowler 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006078
SCALE — | WT | SHEET 1 OF 2

1006078 C

MASTER

INCHES
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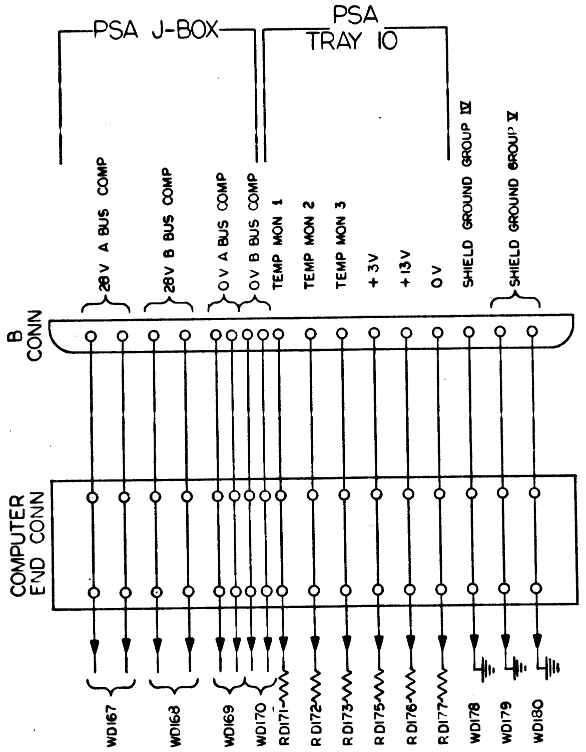
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
C	SECOND SHEET ADDED PER TDRR 03113	10 Sep 63	WK



REV C THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN Mahoney DATE
CHECKED
APPROVAL D.J. Boerke 9/9/63
APPROVAL Eldon C. Hall 10 Sep 63
NASA APPROVAL 9/10/63
MIT APPROVAL W.K. Sep 12 1963

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AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE
WT
SHEET 2 OF 2

1006078 C

INCHES
0 1 2
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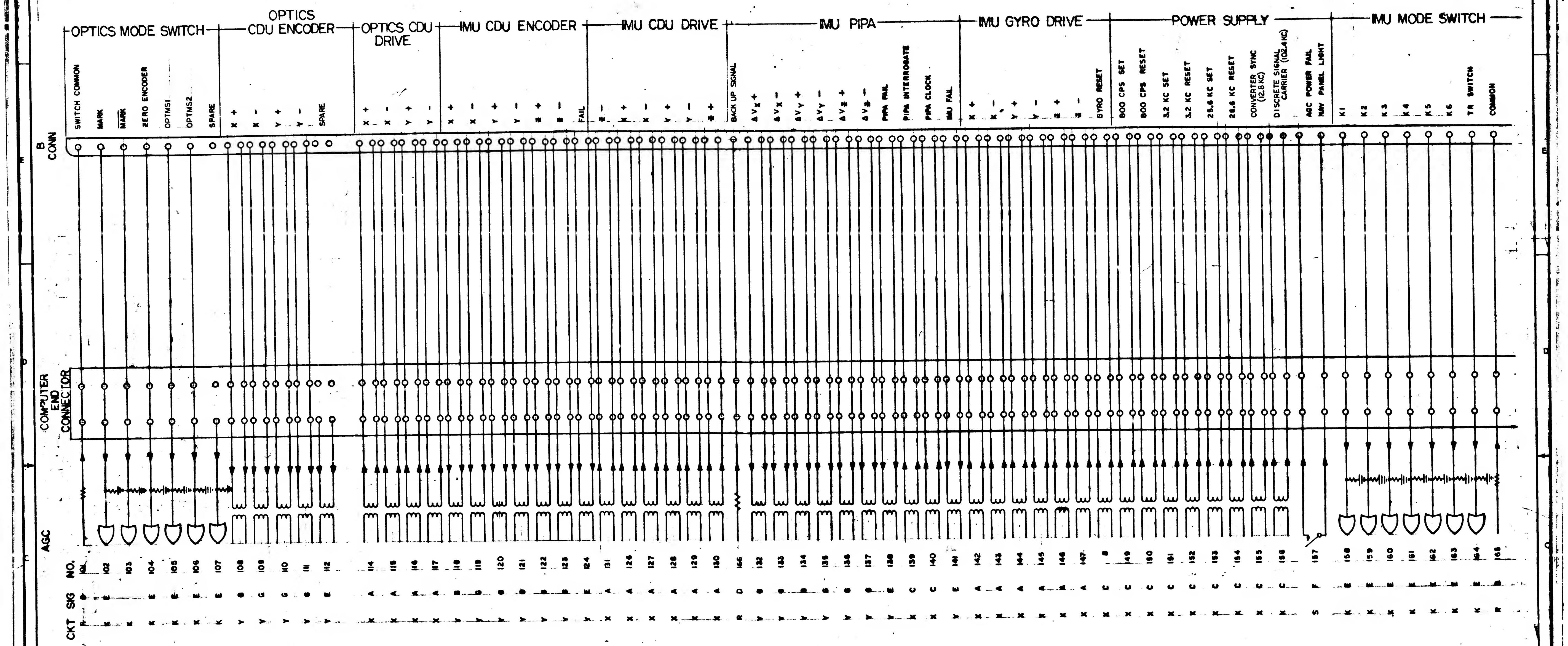
REVISIONS TO ~~EE~~ 00737

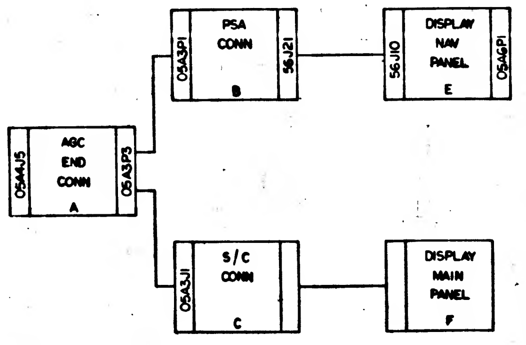
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 00520	16 Jun 63	UK
B	REVISED PER TDRR 01577	6-18-63	n36
C	REVISED PER TDRR 02/13	9-2-63	UK
D	REVISED PER TDDRR 04007	10-11-63	UK



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006086
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUTPUT BITS / INPUT BITS
F	ALARM DETECTION
G	COUNTER

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO. CONTRACT
DRAWN DATE 3/12/63
CHECKED
APPROVAL Donald J. Bowler 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE — WT
SHEET 1 OF 2

1006078 D

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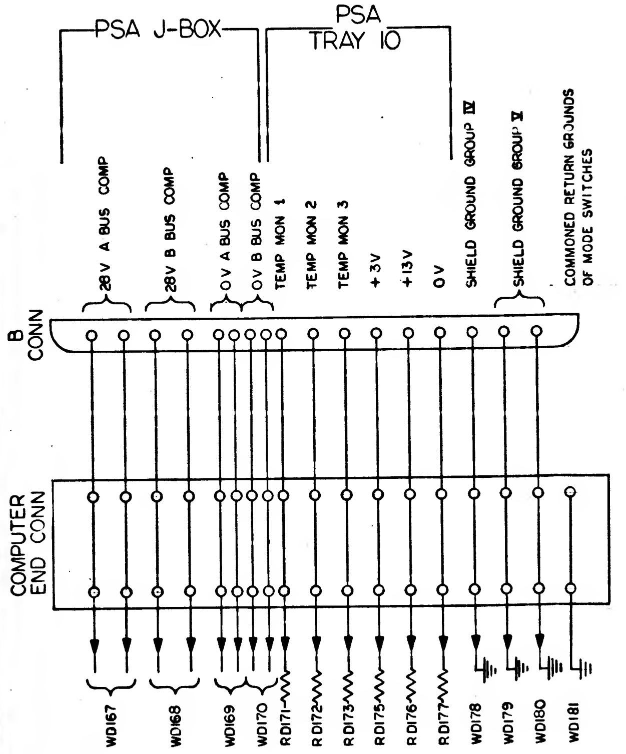
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
C	SECOND SHEET ADDED PER TDRR 03113	10/4/63	WK
D	REVISED PER TDRR 04007	10-17-63	WK.



REV C THIS SHEET ADDED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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APPLICATION

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DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
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DWG NO. CONTRACT
DRAWN Mahoney DATE
CHECKED
APPROVAL D J Bowler 10/4/63
APPROVAL Eldon C Hall 10/4/63
NASA APPROVAL 9/10/63
MIT APPROVAL WK Jan 12 1965

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AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006078
SCALE — | WT | SHEET 2 OF 2

1006078 D

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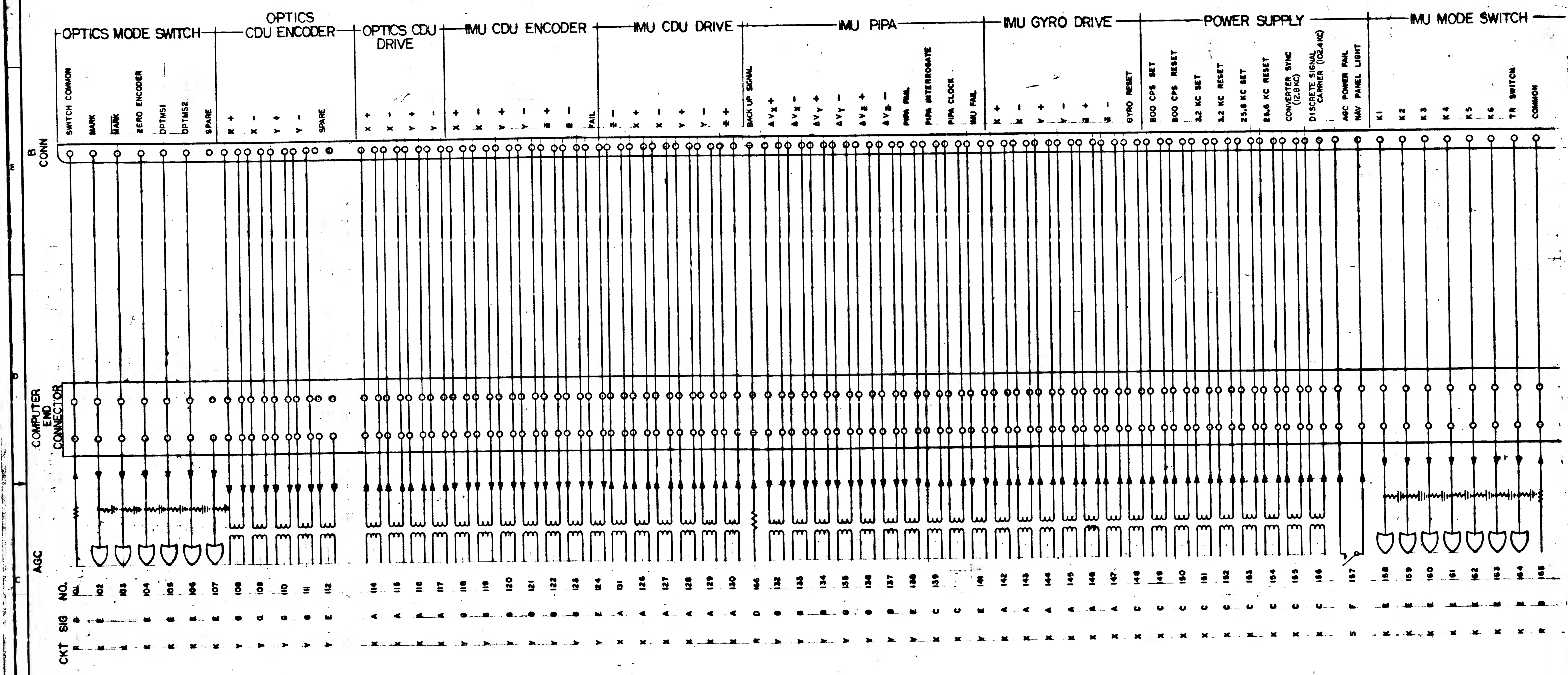
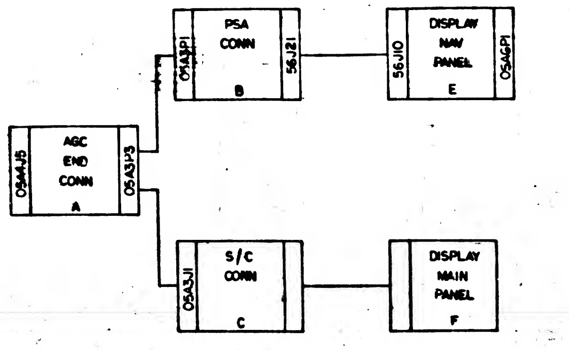
REVISIONS TO EC 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	RE SED PER TDRR 00820	16 Apr 63	
B	REVISED PER TDRR 01577		
C	REVISED PER TDPR 03113	9-12-63	UK
D	REVISED PER TDDRR 04007	10-11-63	UK
E	REVISED PER TDRR 04342	10-30-63	



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006086
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUTPUT BITS/INPUT BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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CAMBRIDGE, MASS
DWG. NO.
CONTRACT
DRAWN DATE
CHECKED
APPROVAL Douglas Barker 4/1/63
APPROVAL
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE —
WT
SHEET 1 OF 2

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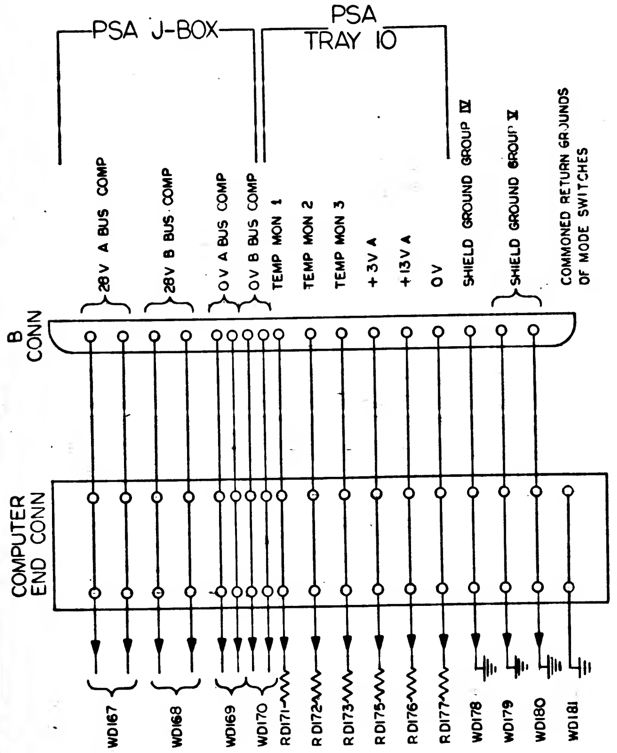
REVISIONS				
	SYM	DESCRIPTION	DATE	APPROVAL
(4)	C	SECOND SHEET ADDED PER TDRR 03113	10/[illegible] 63	WK
(5)	D	REVISED PER TDRR 04007	10-17-63	WK
	E	REVISED PER TDRR 04342	10-30-63	WK



REV C THIS SHEET ADDED

MASTER

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LIST OF MATERIALS			

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APPLICATION	

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DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN Mahoney DATE
CHECKED
APPROVAL D.J. Bowler [illegible]
APPROVAL Eldon C. Hall [illegible]
NASA APPROVAL [illegible] 9/12/63
MIT APPROVAL WK Jan 12/63

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AGC INTERFACE
AGC TO PSA JUNCTION BOX

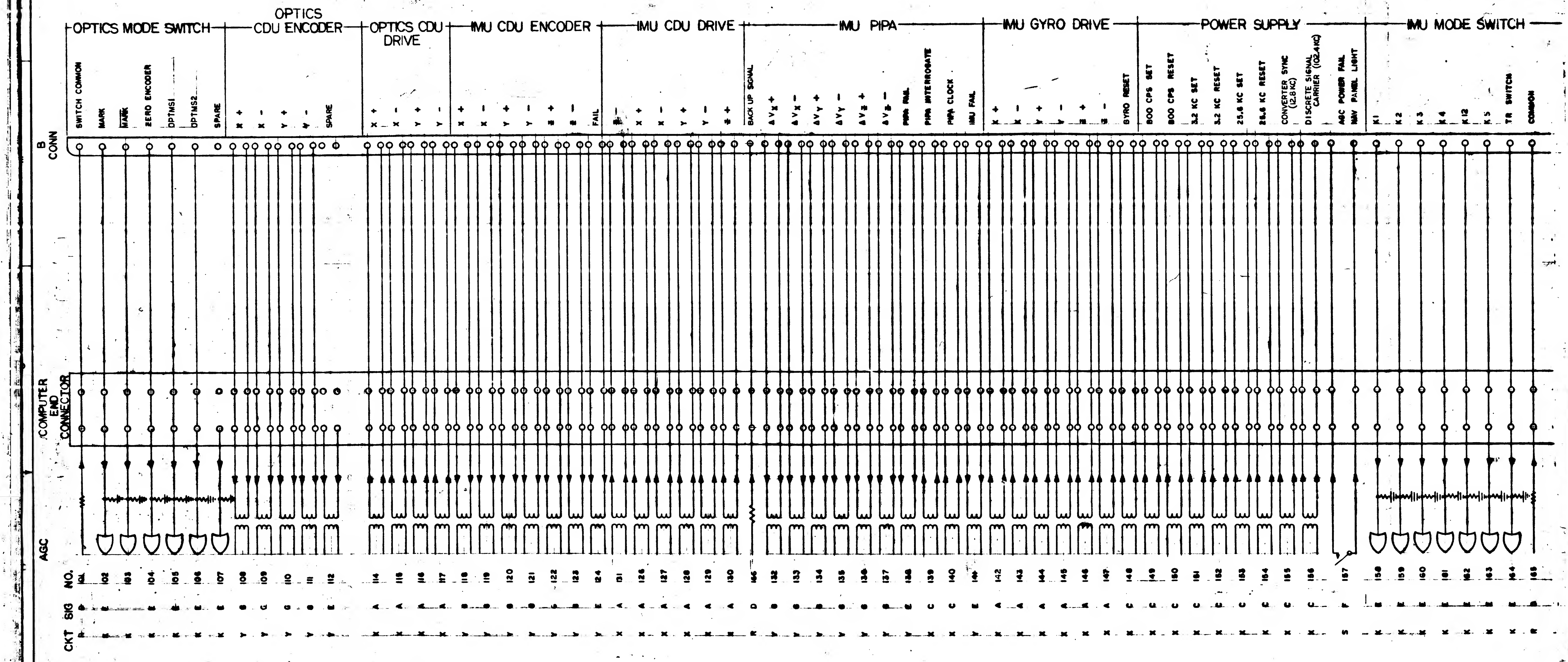
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE
WT
SHEET 2 OF 2

1006078 E

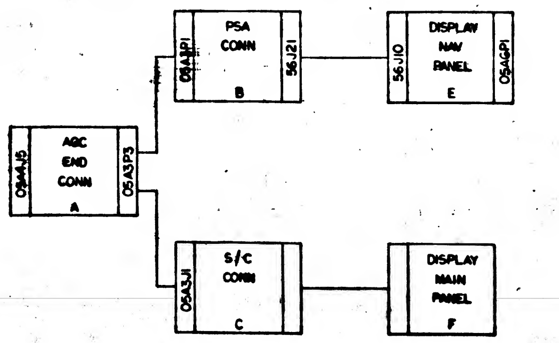
INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	RE SED PER TDRR 00820	16 Jan 63	
B	REVISED PER TDRR 01577	6-18-63	038
C	REVISED PER TDRR 03113	9-12-63	
D	REVISED PER TDDRR 04007	10-11-63	
E	REVISED PER TDRR 04342	10-30-63	
F	REVISED PER TDRR 04914	12-10-63	

REVISIONS TO EC 00737



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

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DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

NEXT ASSY | USED ON
APPLICATION

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN A. Dzugaski DATE 3/19/62
CHECKED
APPROVAL Donald A. Baker 4/1/63
APPROVAL
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006078
SCALE — | WT | SHEET 1 OF 2

1006078 F

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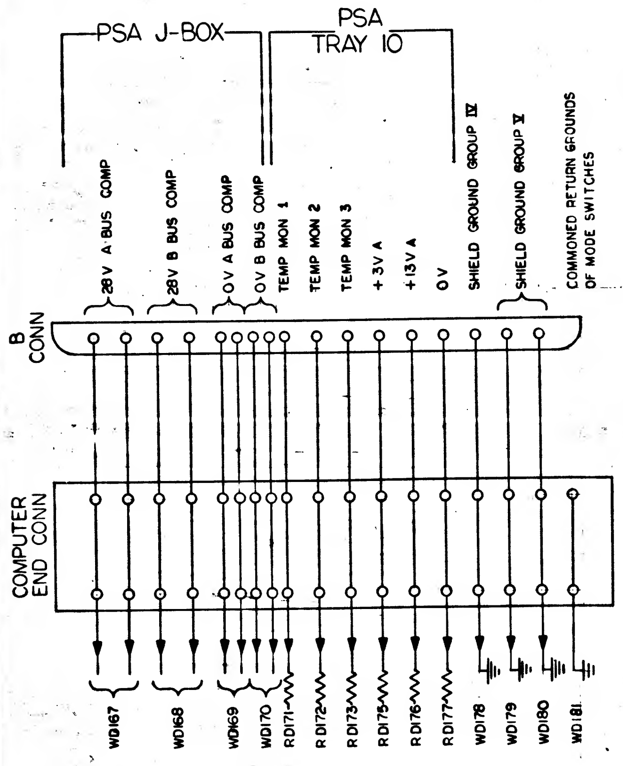
REVISIONS

	SYM	DESCRIPTION	DATE	APPROVAL
④	C	SECOND SHEET ADDED PER TDRR 03113	10 Sep 63	WK
④	D	REVISED PER TDRR 04007	10-11-63	WK
④	E	REVISED PER TDRR 04342	10-30-63	
	F	REVISED PER TDRR 04414		



REV C THIS SHEET ADDED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN Mahoney DATE
CHECKED
APPROVAL D.J. Bowler 12/9/63
APPROVAL Eldon C. Hall 12 Sep 63
NASA APPROVAL 9/10/63
MIT APPROVAL Sep 12 1963

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

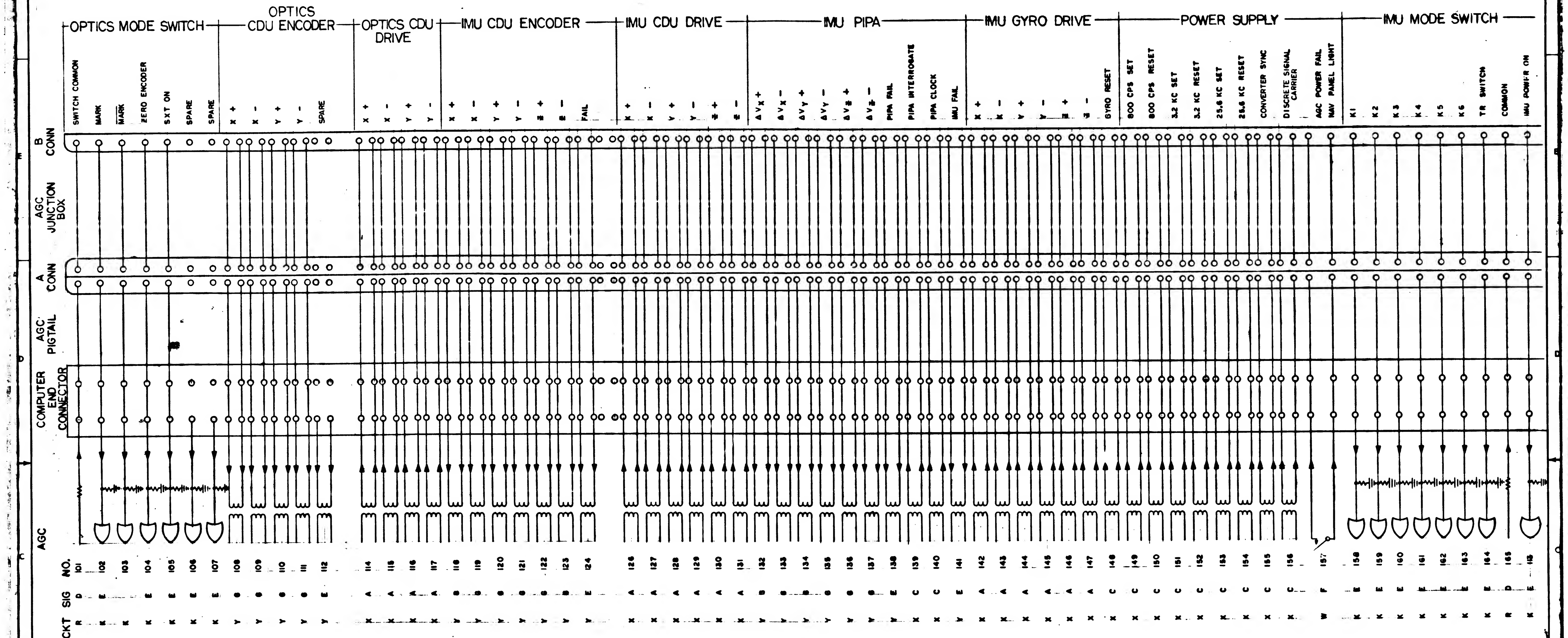
AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006078
SCALE
WT
SHEET 2 OF 2

1006078 E

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



NO.	SIG	CKT
101	D	R
102	E	K
103		K
104	E	K
105	E	K
106	E	K
107	E	K
108	B	Y
109	B	Y
110	B	Y
111	B	Y
112	E	Y
114	A	X
115	A	X
116	A	X
117	A	X
118	B	Y
119	B	Y
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123	B	Y
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133	B	Y
134	B	Y
135	B	Y
136	B	Y
137	B	Y
138	E	Y
139	C	X
140	C	X
141	E	Y
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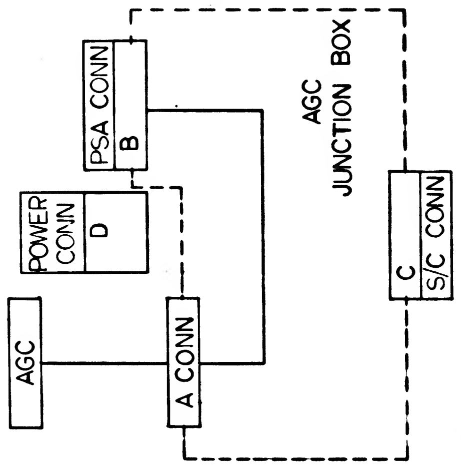
152	C	X
153	C	X
154	C	X
155	C	X
156	C	X
157	F	W
158	E	K
159	E	K
160	E	K
161	E	K
162	E	K
163	E	K
164	E	K
165	D	R
166	E	K

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUTPUT BITS/INPUT BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± —//— DECIMALS ± —//— ANGLES ± —//—
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 3/12/63
CHECKED
APPROVAL Donald A Baker 4/1/63
APPROVAL 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
AGC TO PSA JUNCTION BOX

CODE IDENT NO
SIZE E
NASA DRAWING NO. 1006078
SCALE —//— WT SHEET 1 OF 1

1006078

INCHES 0 1 2
PHOTOGRAPHIC SCALE ONLY

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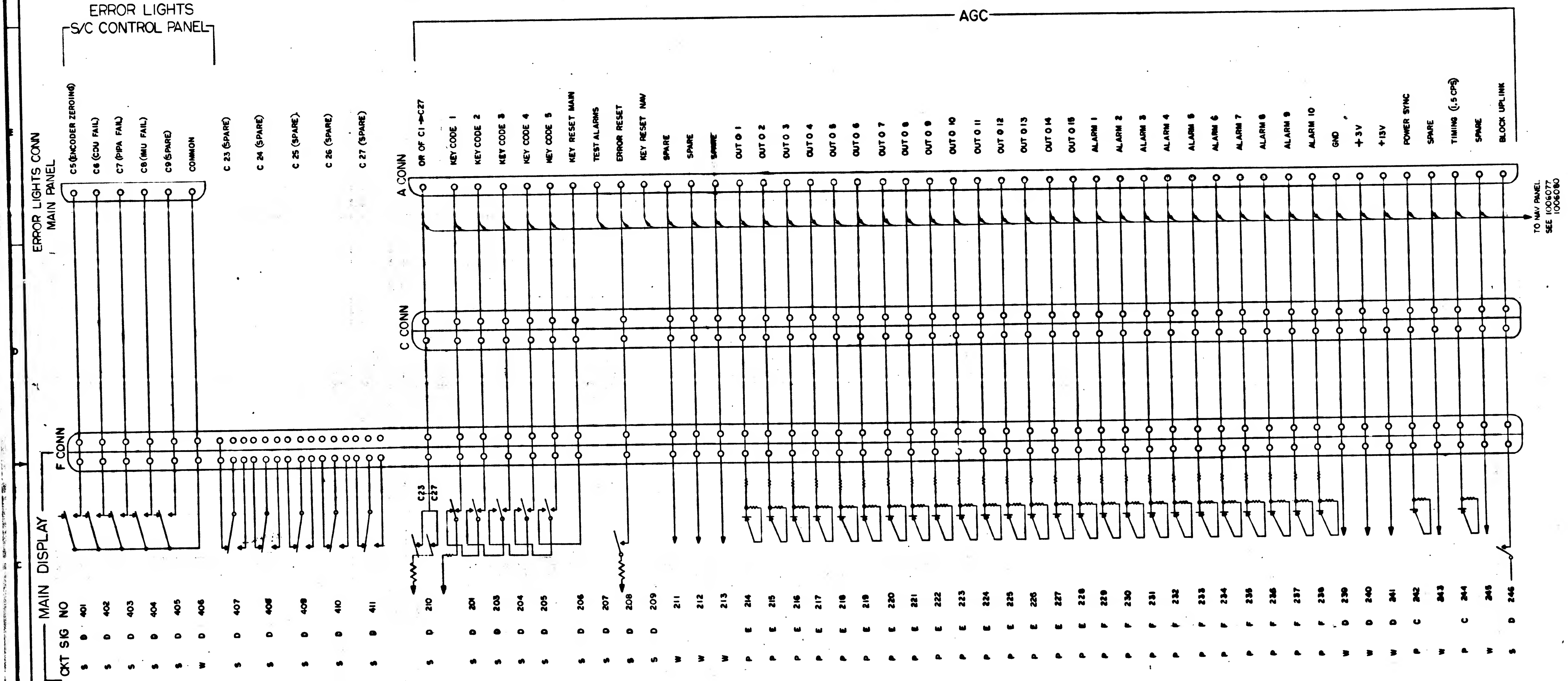
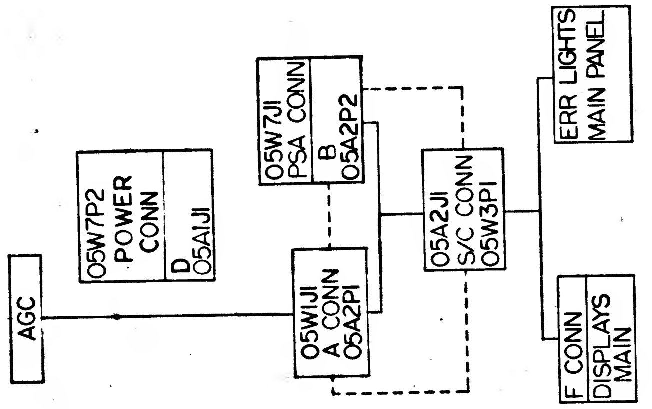
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00813	4/9/63	



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
K	RESISTANCE INPUT/OUTPUT	1006088
K	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN [illegible] DATE 3-25-63
CHECKED K C [illegible] 4/1/63
APPROVAL Donald J Barker 4/1/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

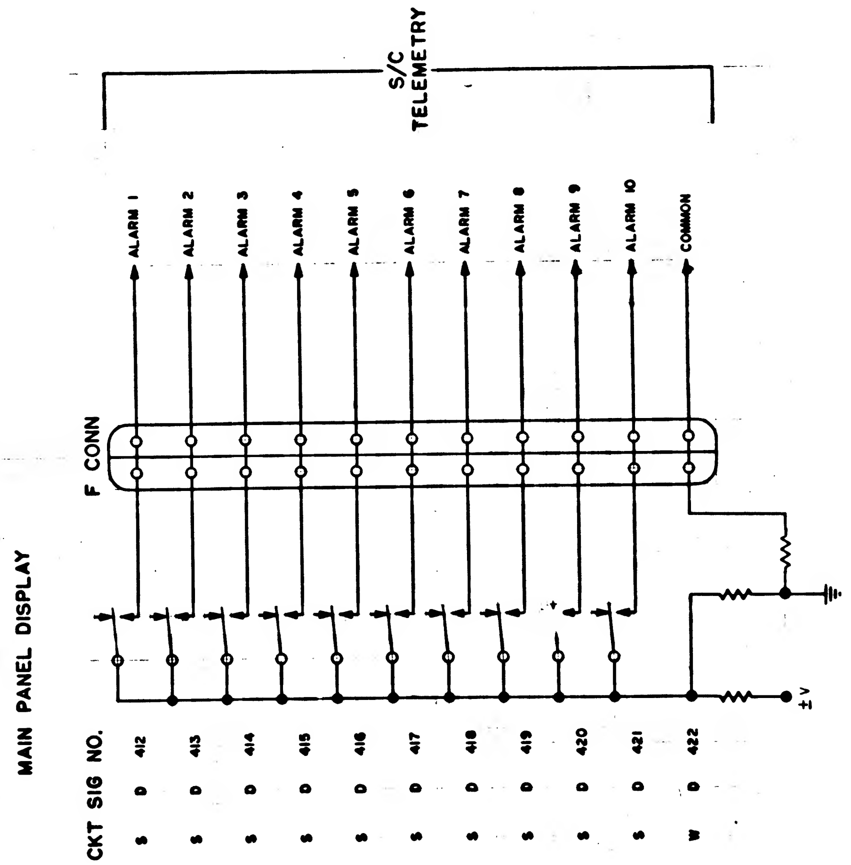
AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006079
SCALE | WT | SHEET 1 OF 2

1006079 A

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	16Sep63	



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

NEXT ASSY | USED ON
APPLICATION

M I T
INSTRUMENTATION LAB
CAMBRIDGE MASS
DRAWN Ken Healy DATE 4-4-63
CHECKED
APPROVAL
APPROVAL Eldon C. Hall
NASA APPROVAL 4/10/63
MIT APPROVAL 10Ap63

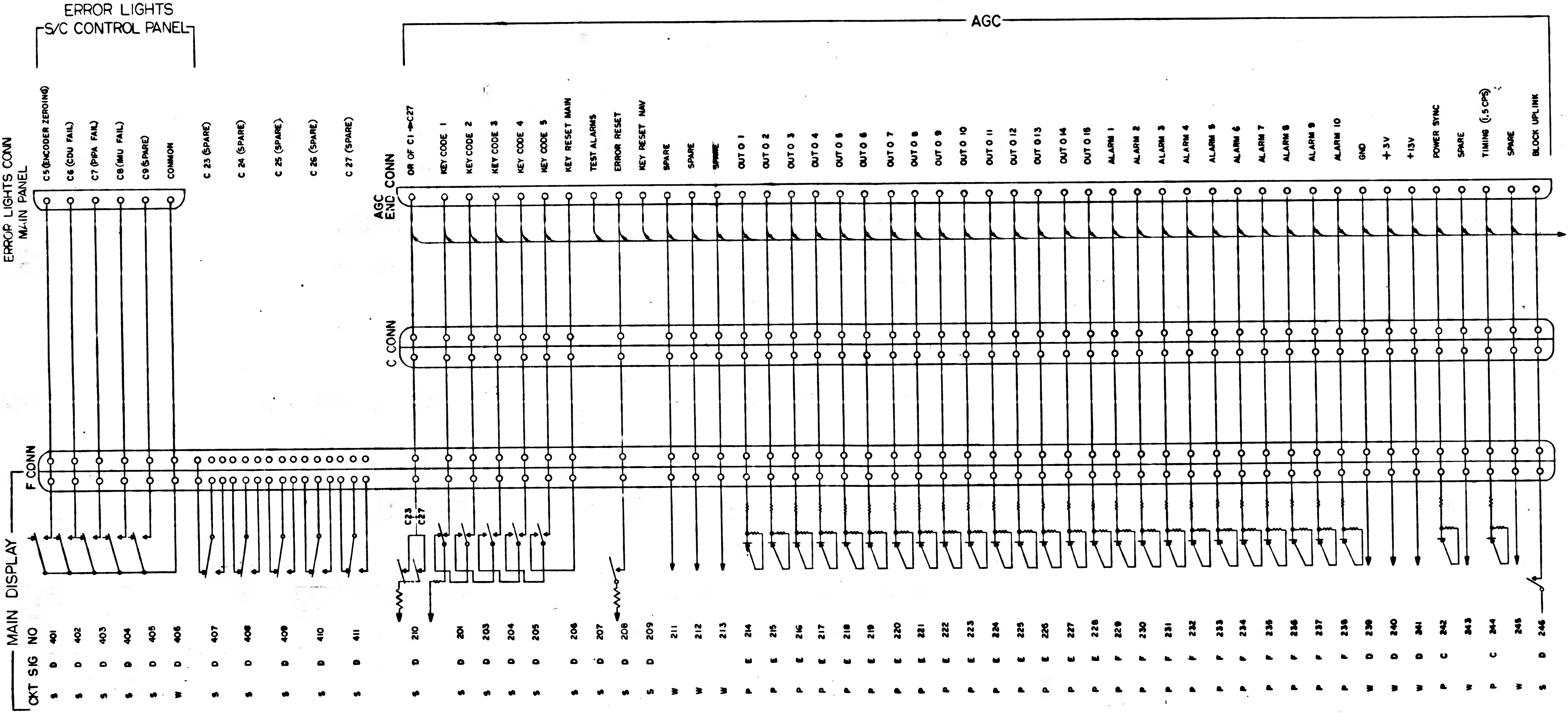
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

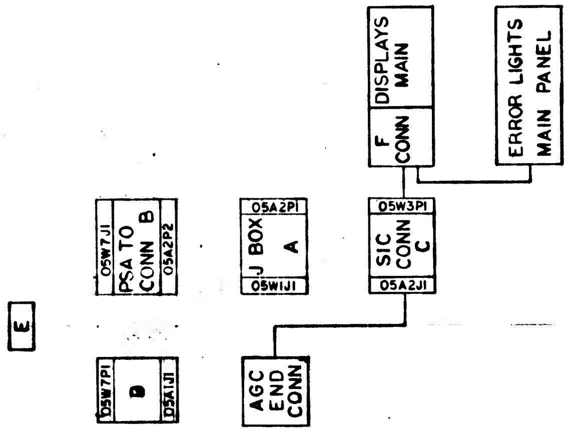
CODE IDENT NO | SIZE E | NASA DRAWING NO 1006079
SCALE # | WT | SHEET 2 OF 2

1006079 A

REVISIONS TDRR 00737				
SYM	DESCRIPTION		DATE	APPROVAL
A	CHANGED PER TDRR 00823			
B	REVISED PER TDRR 01575			036



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
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	SIGNAL TYPE
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MASTER

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LIST OF MATERIALS			

NEXT ASSY	USED ON
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MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DRAWN DATE 3-25-63
CHECKED 4/1/63
APPROVAL Donald J. Barker 4/1/63
APPROVAL 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006079
SCALE
WT
SHEET 1 OF 2

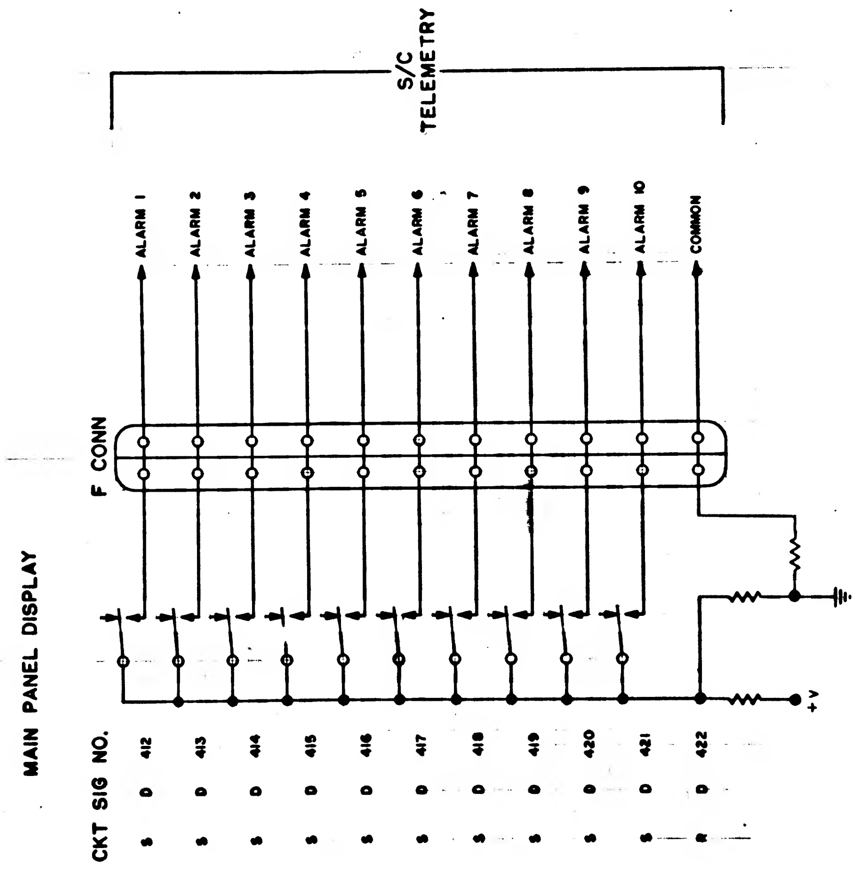
1006079 B

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	16Apr63	
B	REVISED PER TDRR 01575	6/12 63	RRC



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN Wm Healy DATE 4-6-63
CHECKED
APPROVAL
APPROVAL Eldon C Hall 9Apr63
NASA APPROVAL
MIT APPROVAL 10Apr63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006079
SCALE #
WT
SHEET 2 OF 2

1006079 B

MASTER

INCHES
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REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
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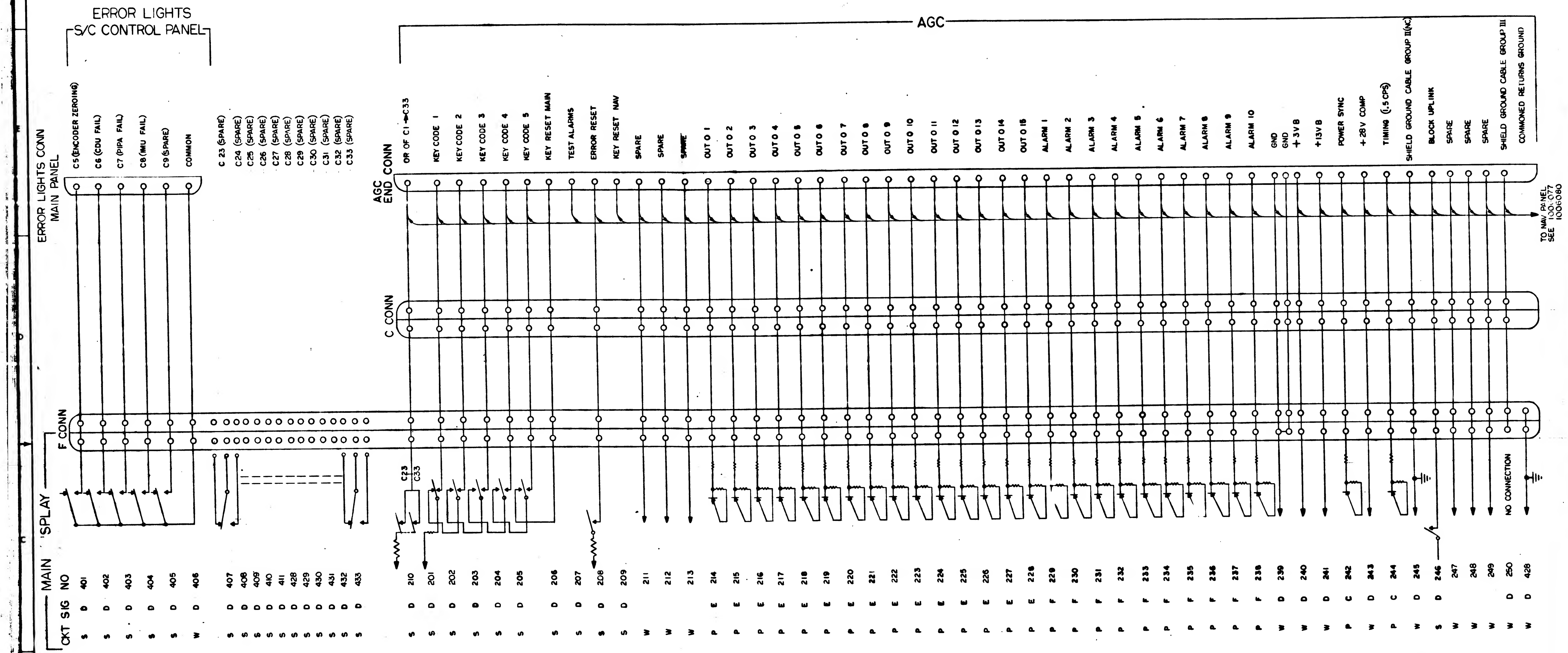
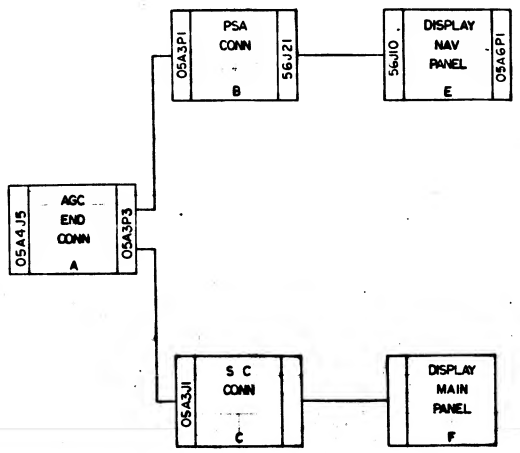
B	REVISED PER TDRR 01575		036
C	REVISED PER TDRR 03134	2-10-63	



	MAIN NO	SIG	CKT
C5 (ENCODER ZEROING)	401	D	S
C6 (CDU FAIL)	402	D	S
C7 (PIPA FAIL)	403	D	S
C8 (IMU FAIL)	404	D	S
C9 (SPARE)	405	D	S
COMMON	406	D	W
C 23 (SPARE)	407	D	S
C24 (SPARE)	408	D	S
C25 (SPARE)	409	D	S
C26 (SPARE)	410	D	S
C27 (SPARE)	411	D	S
C28 (SPARE)	428	D	S
C29 (SPARE)	429	D	S
C30 (SPARE)	430	D	S
C31 (SPARE)	431	D	S
C32 (SPARE)	432	D	S
C33 (SPARE)	433	D	S
OR OF C1 → C33	210	D	S
KEY CODE 1	201	D	S
KEY CODE 2	202	D	S
KEY CODE 3	203	D	S
KEY CODE 4	204	D	S
KEY CODE 5	205	D	S
KEY RESET MAIN	206	D	S
TEST ALARMS	207	D	S
ERROR RESET	208	D	S
KEY RESET NAV	209	D	S
SPARE	211		W
SPARE	212		W
~~SPARE~~	213		W
OUT O 1	214	E	P
OUT O 2	215	E	P
OUT O 3	216	E	P
OUT O 4	217	E	P
OUT O 5	218	E	P
OUT O 6	219	E	P
OUT O 7	220	E	P
OUT O 8	221	E	P
OUT O 9	222	E	P
OUT O 10	223	E	P
OUT O 11	224	E	P
OUT O 12	225	E	P
OUT O 13	226	E	P
OUT O 14	227	E	P
OUT O 15	228	E	P
ALARM 1	229	F	P
ALARM 2	230	F	P
ALARM 3	231	F	P
ALARM 4	232	F	P
ALARM 5	233	F	P
ALARM 6	234	F	P
ALARM 7	235	F	P
ALARM 8	236	F	P
ALARM 9	237	F	P
ALARM 10	238	F	P
GND GND	239	D	W
+3 V B	240	D	W
+13 V B	241	D	W
POWER SYNC	242	C	P
+28 V COMP	243	D	W
TIMING (1.5 CPS)	244	C	P
SHIELD GROUND CABLE GROUP II (NC)	245	D	W
BLOCK UPLINK	246	D	S
SPARE	247		W
SPARE	248		W
SPARE	249		W
SHIELD GROUND CABLE GROUP III	250	D	W
COMMONED RETURNS GROUND	428	D	W

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
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D	DC
E	OUT BITS/IN BITS
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G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 3-25-63
CHECKED KL 4/1/63
APPROVAL Donald J Barker 4/1/63
APPROVAL 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006079
SCALE
WT
SHEET 1 OF 2

1006079 C

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	10Apr63	WK
B	REVISED PER TDRR 01575	6-18-63	RRB
C	REVISED PER TDRR 03.34	9-18-63	WK

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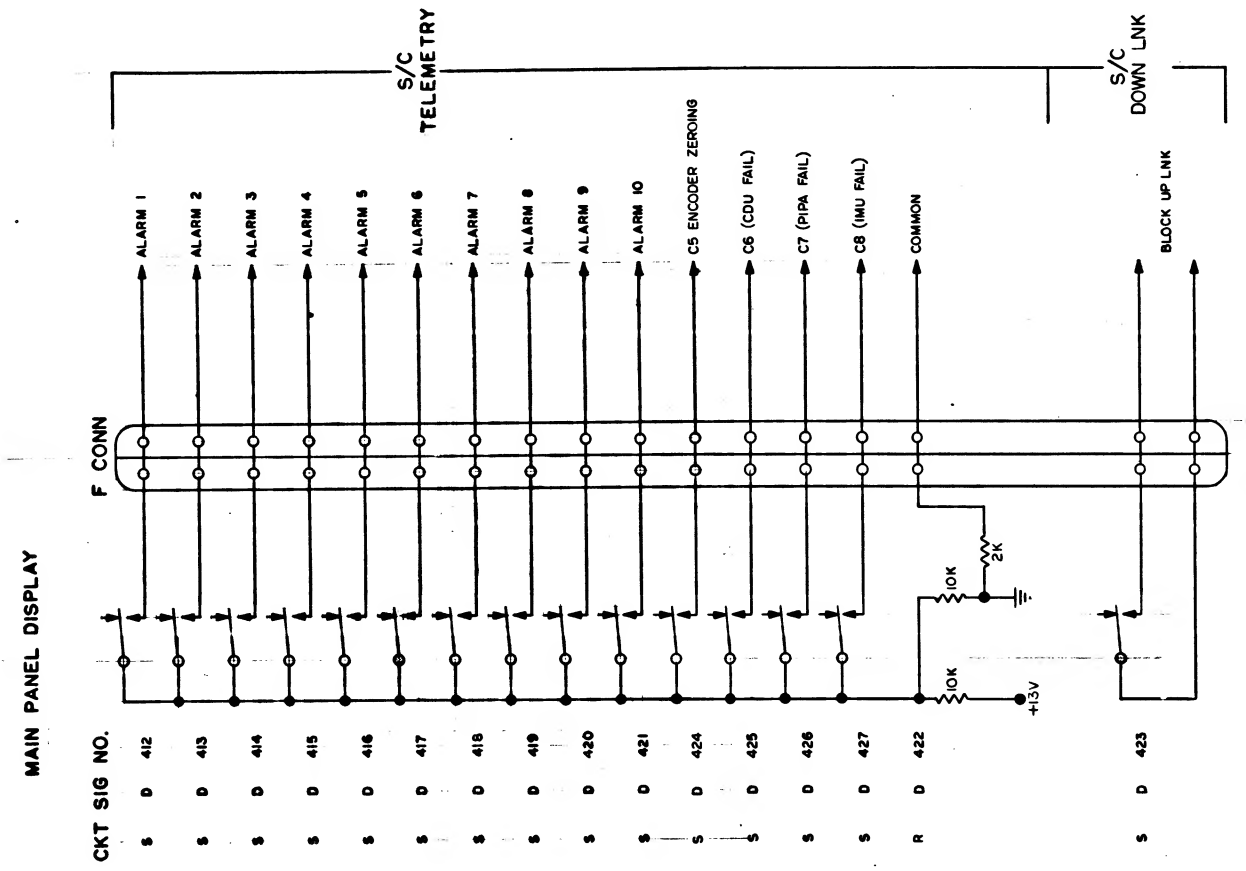

MASTER

1006079 C

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN Don Healy DATE 4-4-63
CHECKED
APPROVAL Donald J 10Apr63
APPROVAL Eldon C Hall 10Apr63
NASA APPROVAL 4/11/63
MIT APPROVAL W Kupfer 10Apr63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006079
SCALE #
WT
SHEET 2 OF 2

INCHES
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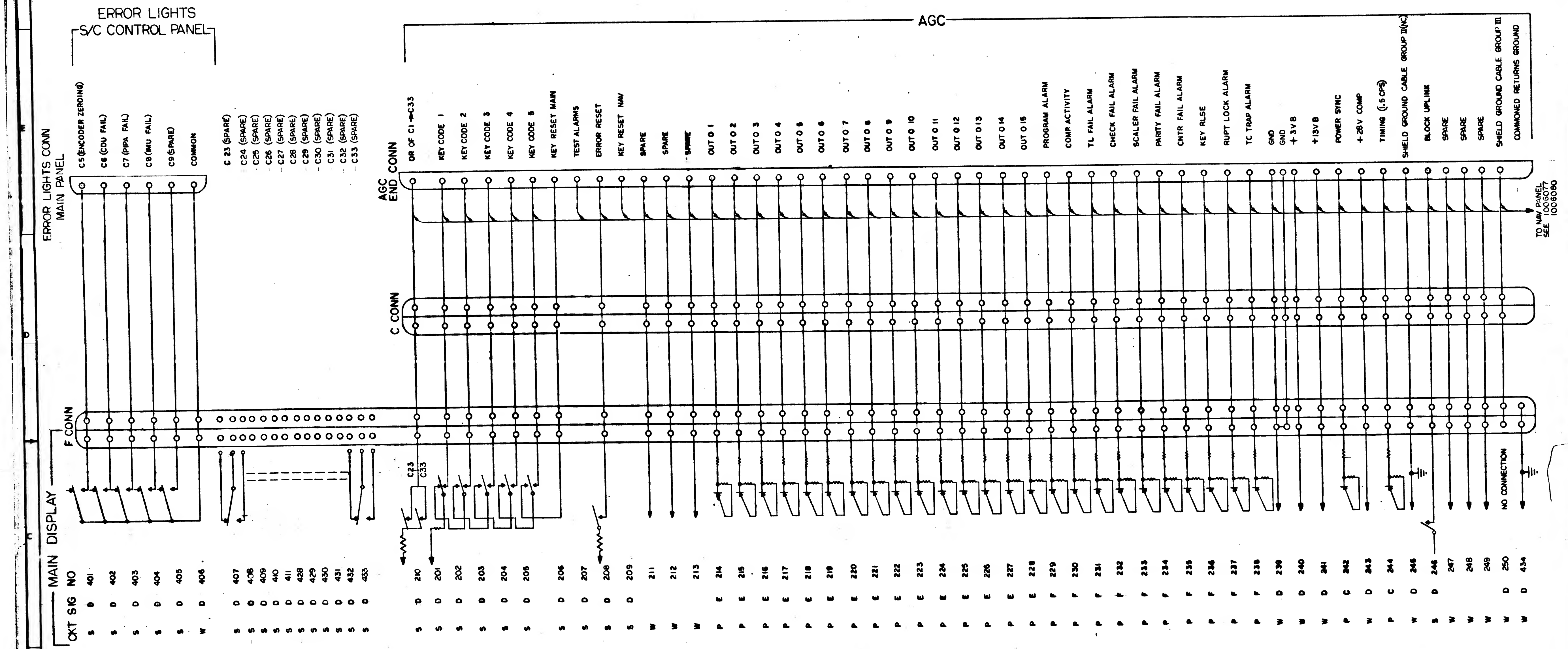
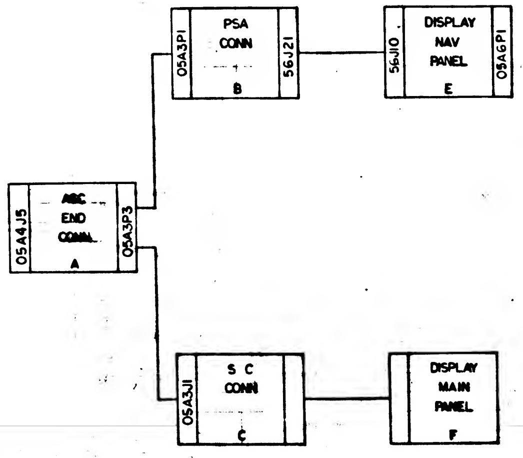
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	[illegible]	[illegible]
B	REVISED PER TDRR 01575	[illegible]	03B [illegible]
C	REVISED PER TDRR 03134	9-13-63	[illegible]
D	REVISED PER TDRR 04039	[illegible]	[illegible]



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE
- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUT BITS/IN BITS
- F ALARM DETECTION
- G COUNTER

MASTER

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN [illegible] DATE 3-25-63
CHECKED [illegible] 4/1/63
APPROVAL Donald J. Barber 4/1/63
APPROVAL [illegible] 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006079
SCALE
WT
SHEET 1 OF 2

INCHES
0
PHOTOGRAPHIC SCALE ONLY

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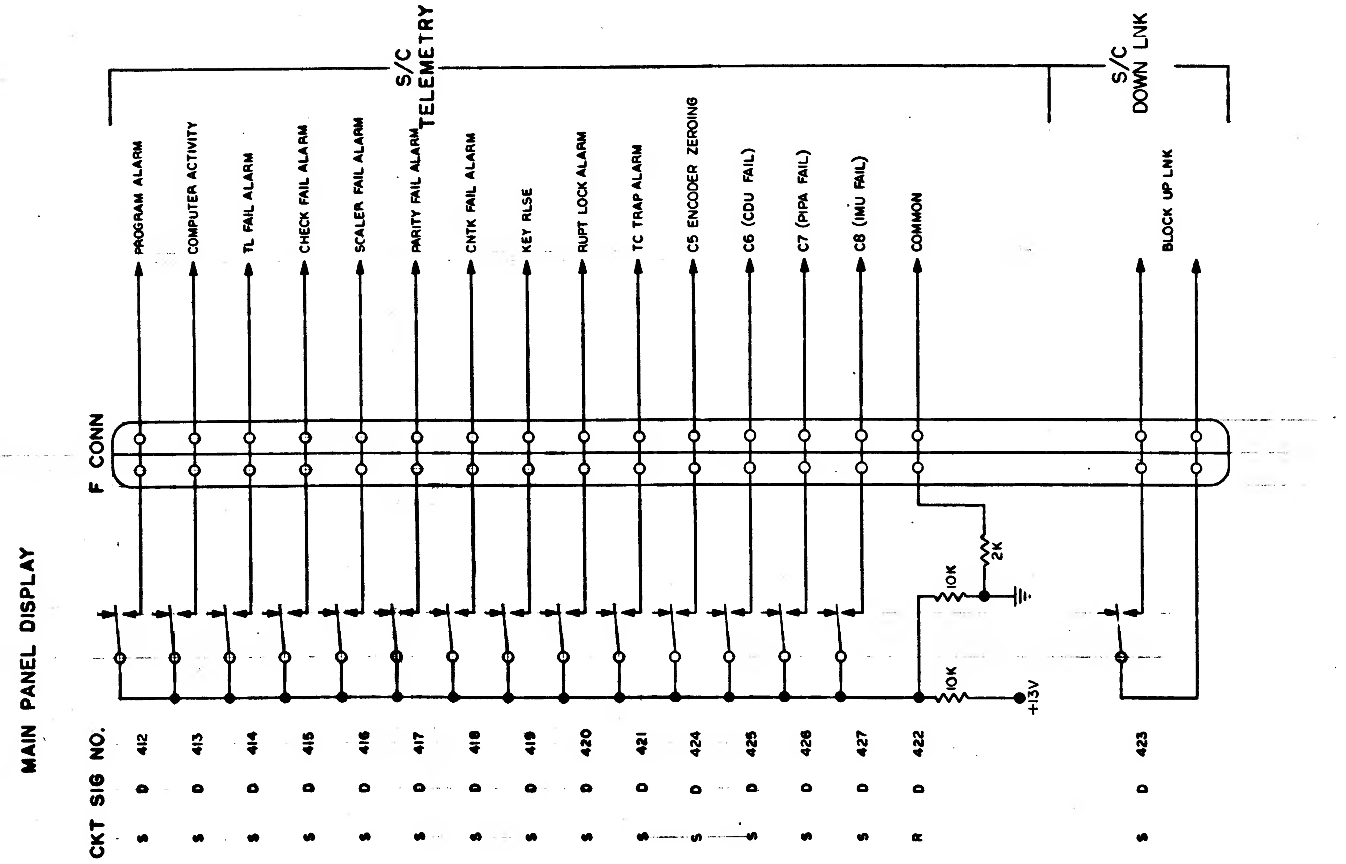
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	10Apr63	[illegible]
B	REVISED PER TDRR 01575	6-12-63	RAC
C	REVISED PER TDRR 03 34	9-2-63	WK
D	REVISED PER TDRR 04 39	10-17-63	WK



MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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FRACTIONS ± — DECIMALS ± — ANGLES ± —
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MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN Ken Healy DATE 4-4-63
CHECKED
APPROVAL Donald J Barker [illegible]
APPROVAL Eldon C Hall [illegible]
NASA APPROVAL [illegible] 4/11/63
MIT APPROVAL W Kupfer 10Apr63

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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006079
SCALE — | WT | SHEET 2 OF 2

1006079 D

INCHES
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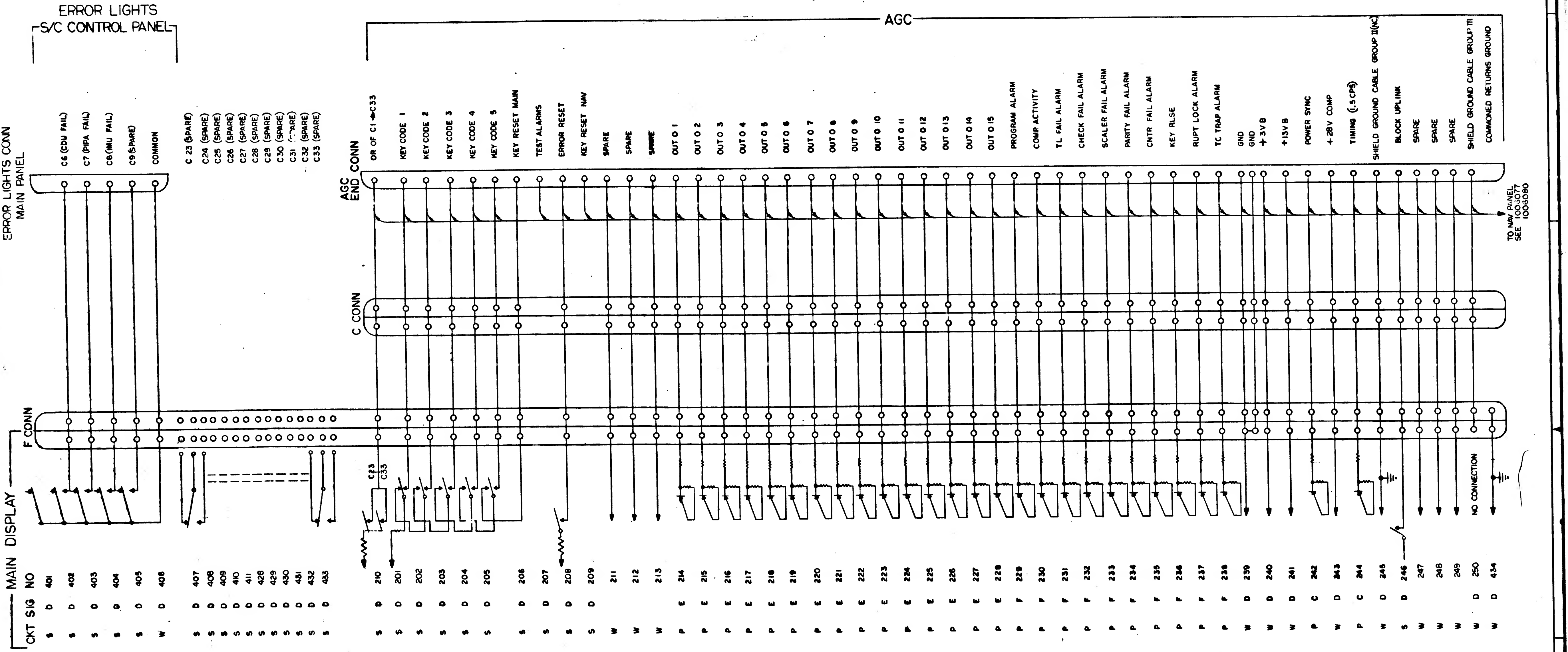
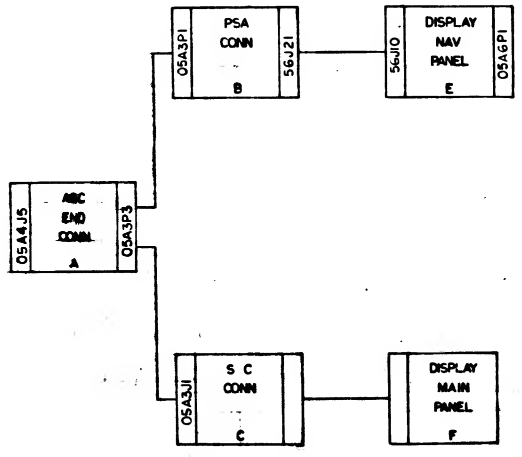
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	10 Apr 63	WK
B	REVISED PER TDRR 01575	11 Jun 63	036 RKB
C	REVISED PER TDRR 03134	9-13-63	RDC WK
D	REVISED PER TDRR 04039	10-17-63	RDC WK
E	REVISED PER TDRR 64509	12-6-63	RDC WK



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ ~~DENOTES SIGNAL GND, NOT BASE GND~~



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
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MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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DWG NO. CONTRACT
DRAWN DATE 3-25-63
CHECKED K E 4/1/63
APPROVAL Donald J Barker 4/1/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006079
SCALE
WT
SHEET 1 OF 2

1006079 E

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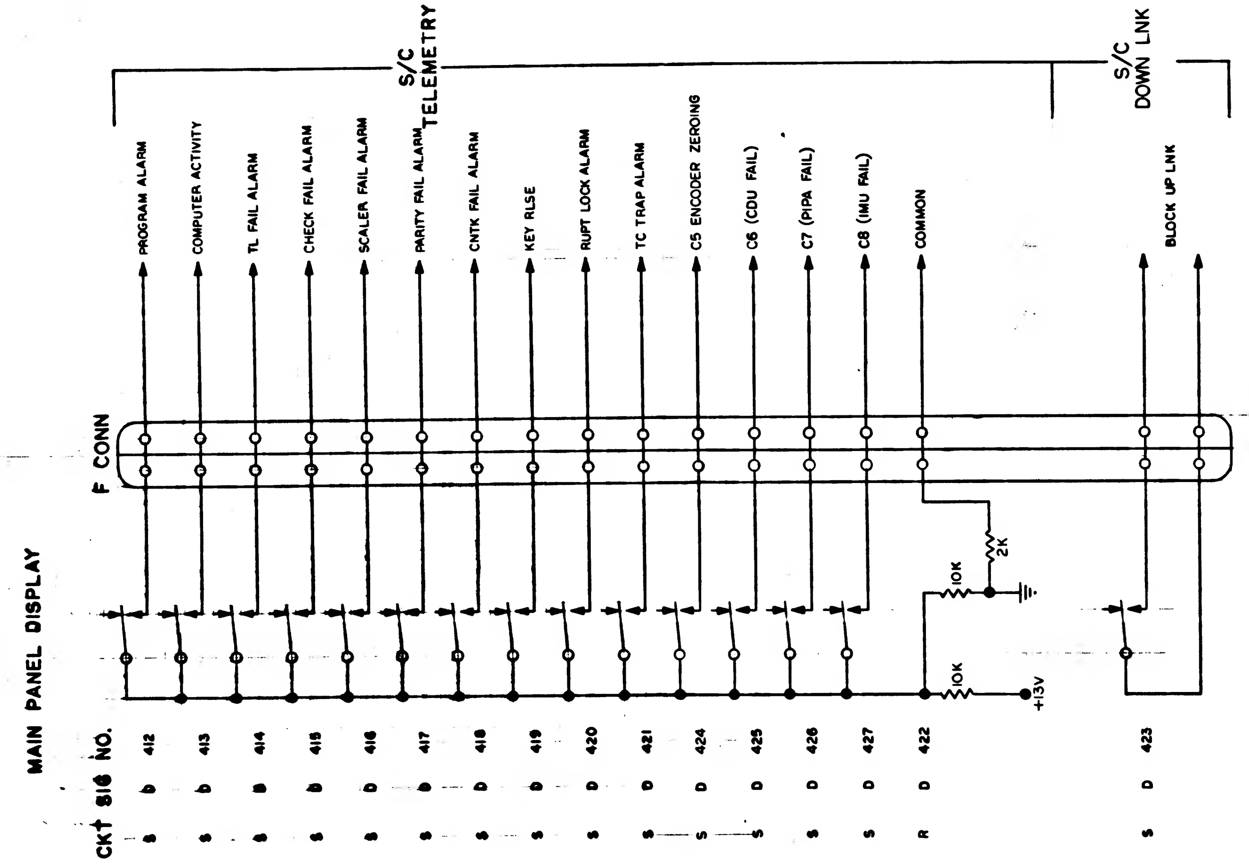
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	10Apr63	WK
B	REVISED PER TDRR 01575	6-10-63	DJB RAB
C	REVISED PER TDRR 03134	9-12-63	EPK WK
D	REVISED PER TDRR 04039	10-17-63	EPK WK
E	REVISED PER TDRR 04509	11-6-63	TBG WK



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
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MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN Ken Healy DATE 4-4-63
CHECKED
APPROVAL Donald J. Bartley 3May63
APPROVAL Eldon C. Hall 3May63
NASA APPROVAL 4-10-63
MIT APPROVAL W. Kupfer 10Apr63

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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006079
SCALE — | WT | SHEET 2 OF 2

MASTER

INCHES
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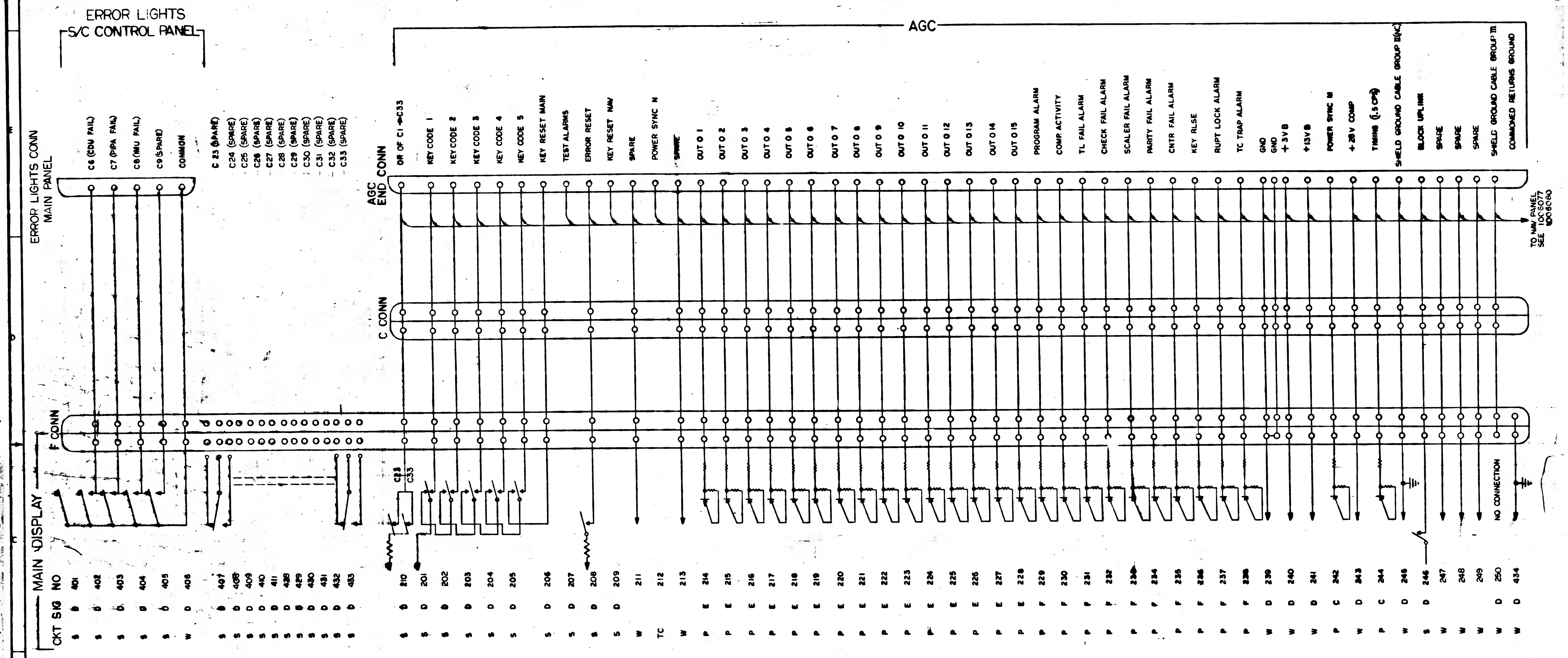
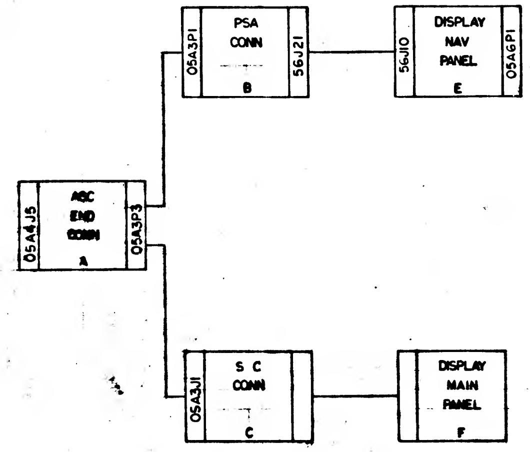
REVISIONS TDRR 00733

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	[illegible] 63	WK
B	REVISED PER TDRR 01575	[illegible] 63	DJB RKB
C	REVISED PER TDRR 03134	9-13-63	WK
D	REVISED PER TDRR 04039	[illegible]-63	WK
E	REVISED PER TDRR 64509	11-6-63	WK
F	REVISED PER TDRR	[illegible]	[illegible]



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ ~~DENOTES SIGNAL [illegible]~~



DRAWING
1006009
1006087
1006088
1006088
N/A
1006089
1006089

CIRCUIT TYPE
- X TRANSFORMER OUTPUT
- Y TRANSFORMER INPUT
- R RESISTANCE INPUT/OUTPUT
- K MICRO LOGIC INPUT
- T TRANSISTOR OUTPUT
- W WIRE INPUT/OUTPUT
- S CONTACT CLOSURE
- P TRANSISTOR INPUT

SIGNAL TYPE
- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUT BITS/IN BITS
- F ALARM DETECTION
- G COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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FINAL FINISH —

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DRAWN [illegible] DATE 3-25-63
CHECKED [illegible] 4/1/63
APPROVAL Donald J. Baker 4/1/63
APPROVAL [illegible] 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 April 63

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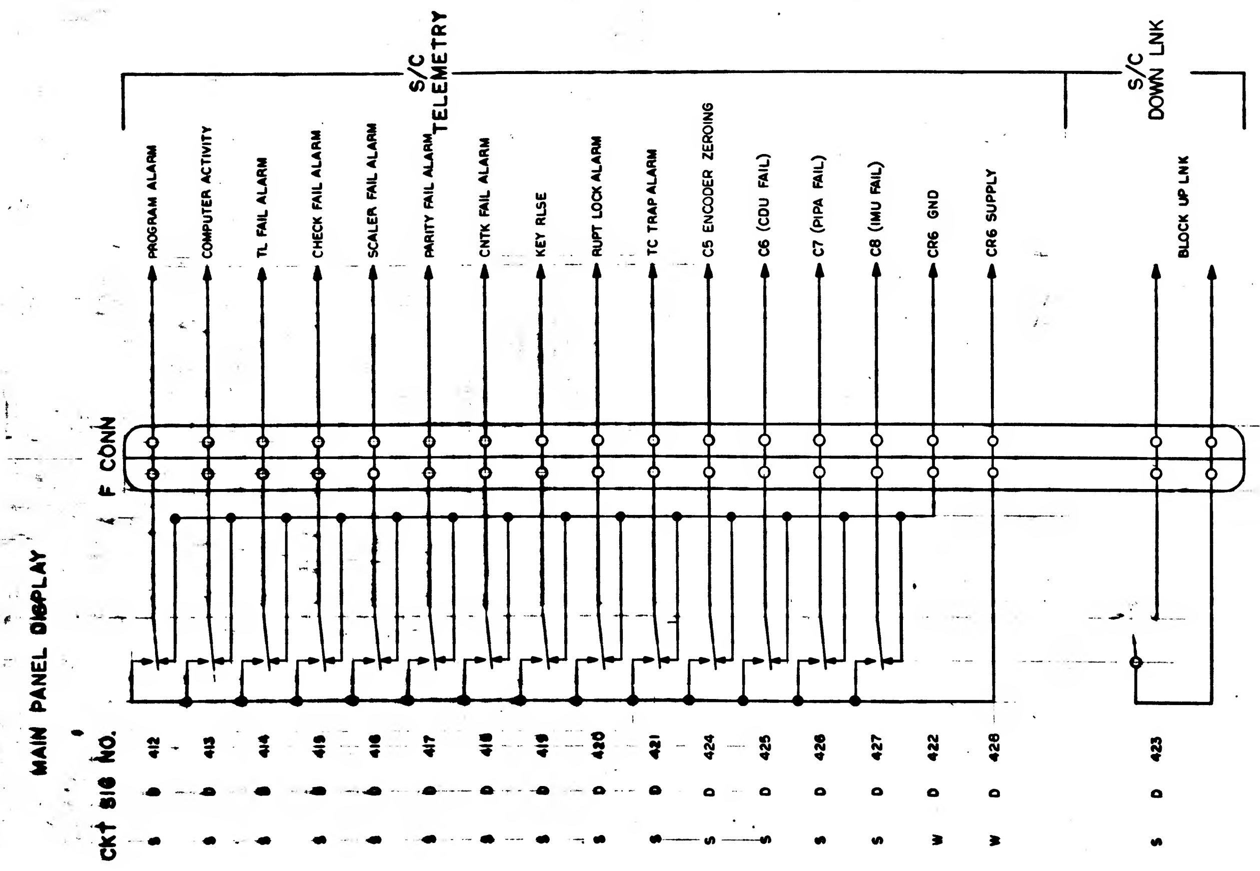
AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006079
SCALE | WT | SHEET 1 OF 2

1006079

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	[illegible] 63	[illegible]
B	REVISED PER TDRR 01575	[illegible] 63	DJB RRC
C	REVISED PER TDRR 03134	9-12-63	[illegible] WK
D	REVISED PER TDRR 04039	10-11-63	[illegible] WK
E	REVISED PER TDRR 04509	11-6-63	[illegible] WK
F	REVISED PER TDRR 06050	[illegible]	[illegible]



NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
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DWG NO CONTRACT

DRAWN [illegible] DATE 4-4-63
CHECKED
APPROVAL Donald J [illegible] [illegible] 63
APPROVAL [illegible] [illegible] 63
NASA APPROVAL [illegible] [illegible] 63
MIT APPROVAL [illegible] 10 [illegible] 63

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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006079
SCALE # WT SHEET 2 OF 2

1006079

MASTER

INCHES
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REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	[illegible]	wk
B	REVISED PER TDRR 01575	[illegible] 63	DJB
C	REVISED PER TDRR 03134	7-12-63	EDC WK
D	REVISED PER TDRR 04039	[illegible]	WK
E	REVISED PER TDRR 64509	11-6-63	WK
F	REVISED PER TDRR 06050	[illegible]	
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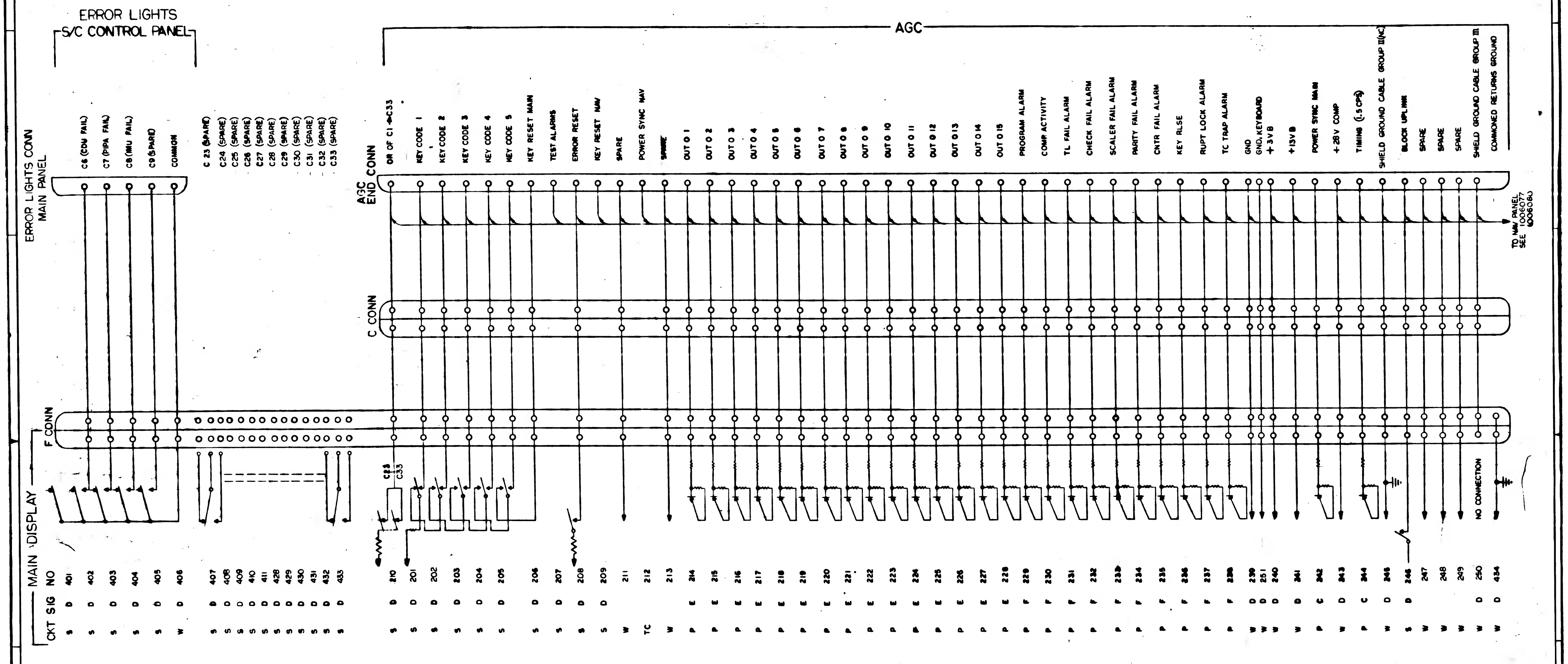
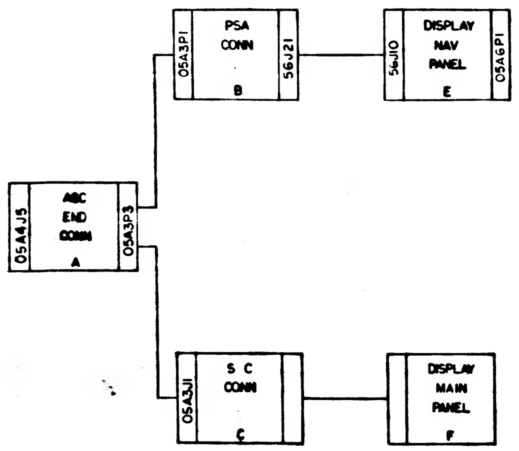


NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
M	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUT BITS/IN BITS
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G	COUNTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

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MATERIAL —
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FINAL FINISH —

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DWG NO
CONTRACT
DRAWN [illegible] DATE 3-25-63
CHECKED [illegible] 4/1/63
APPROVAL Donald [illegible] 4/1/63
APPROVAL [illegible] 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

MANNED SPACECRAFT CENTER
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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006079
SCALE
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SHEET 1 OF 2

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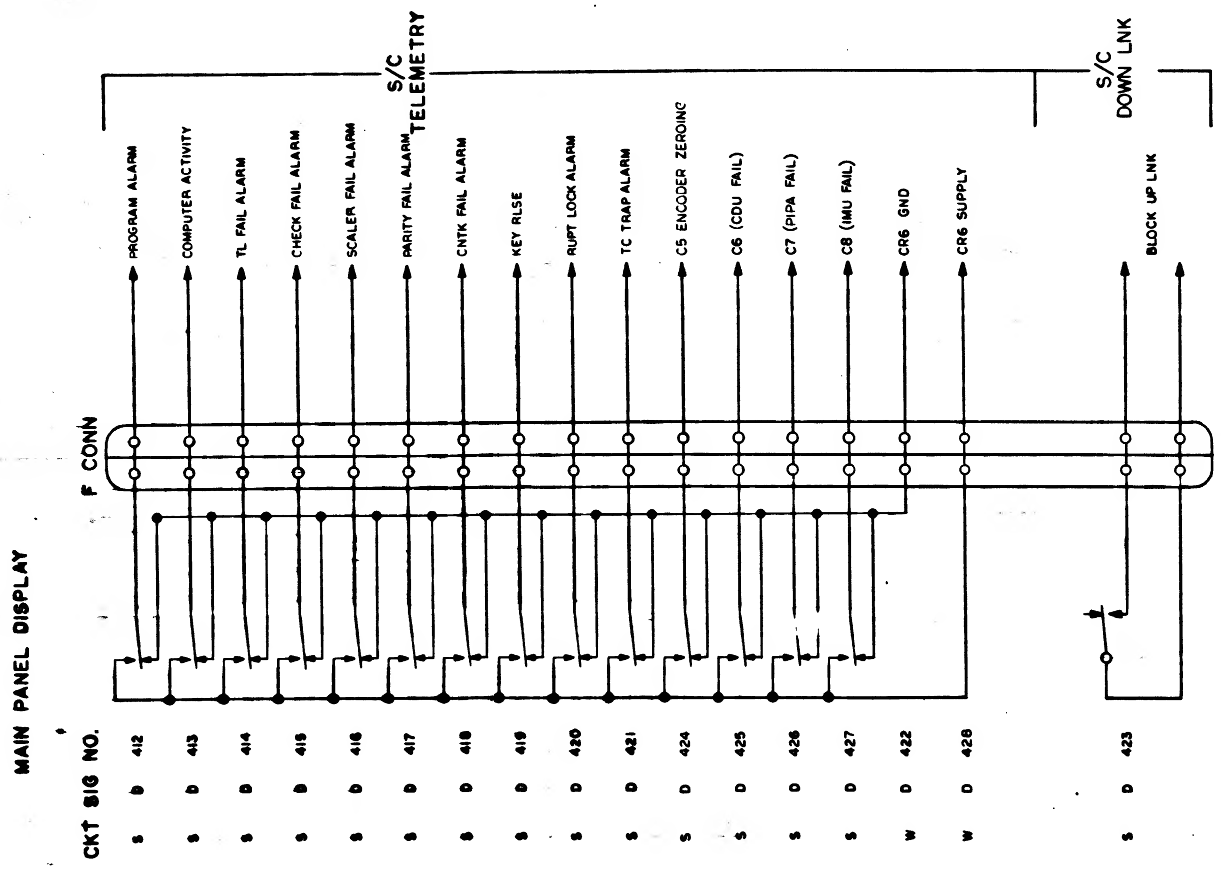
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00823	10Apr63	
B	REVISED PER TDRR 01575		RRC
C	REVISED PER TDRR 03134	9-12-63	WK
D	REVISED PER TDRR 04039	10-17-63	WK
E	REVISED PER TDRR 04509	11-6-63	WK
F	REVISED PER TDRR 06050		
G	CHANGED PER TDRR 07070 DRAWN CHK		



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APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL 10Apr63

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AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO. —
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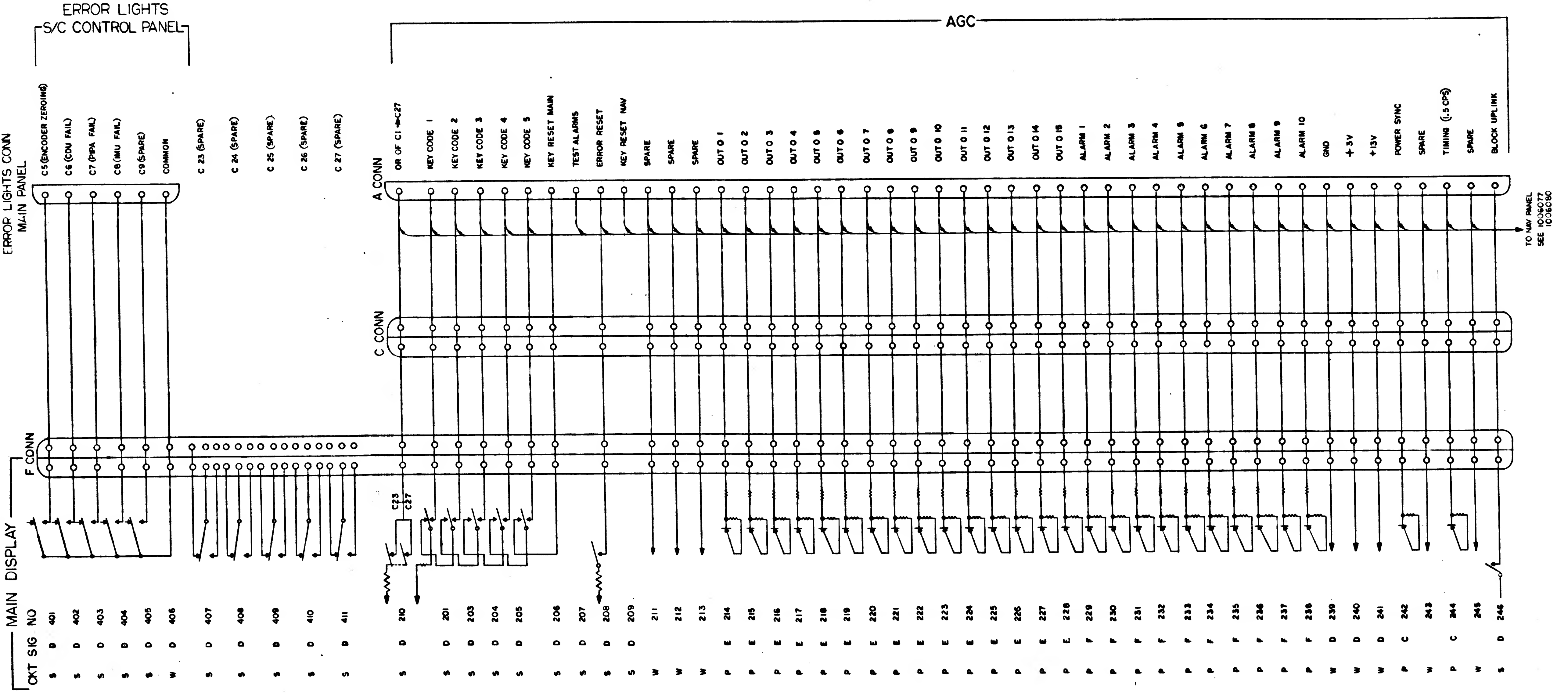
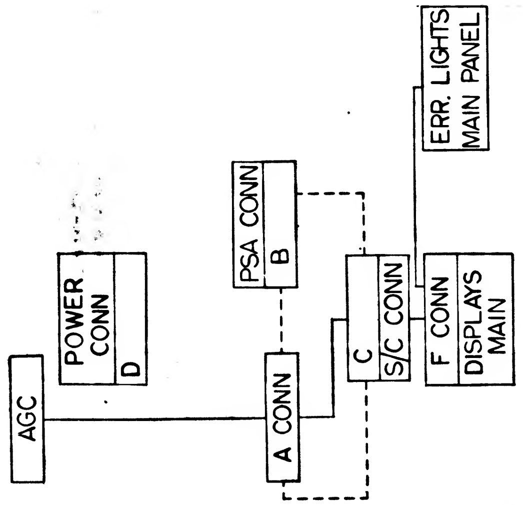
REVISIONS TDRR 00232			
SYM	DESCRIPTION	DATE	APPROVAL





NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D 70327

	CIRCUIT TYPE	DRAWING
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
K	RESISTANCE INPUT/OUTPUT	1006088
K	MICRO LOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	CONTACT CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

	SIGNAL TYPE
A	CONTROLLED RATE
B	DISCRETE RATE
C	FIXED FREQUENCY
D	DC
E	OUT BITS/IN BITS
F	ALARM DETECTION
G	COUNTER

MASTER

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LIST OF MATERIALS

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DWG NO CONTRACT
DRAWN DATE 3-25-63
CHECKED K L Dean 4/1/63
APPROVAL Donald J Bowler 4/1/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL
MIT APPROVAL W Kupfer 3 Apr 63

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HOUSTON, TEXAS

AGC INTERFACE
MAIN PANEL DISPLAY

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006079
SCALE
WT
SHEET OF

1006079

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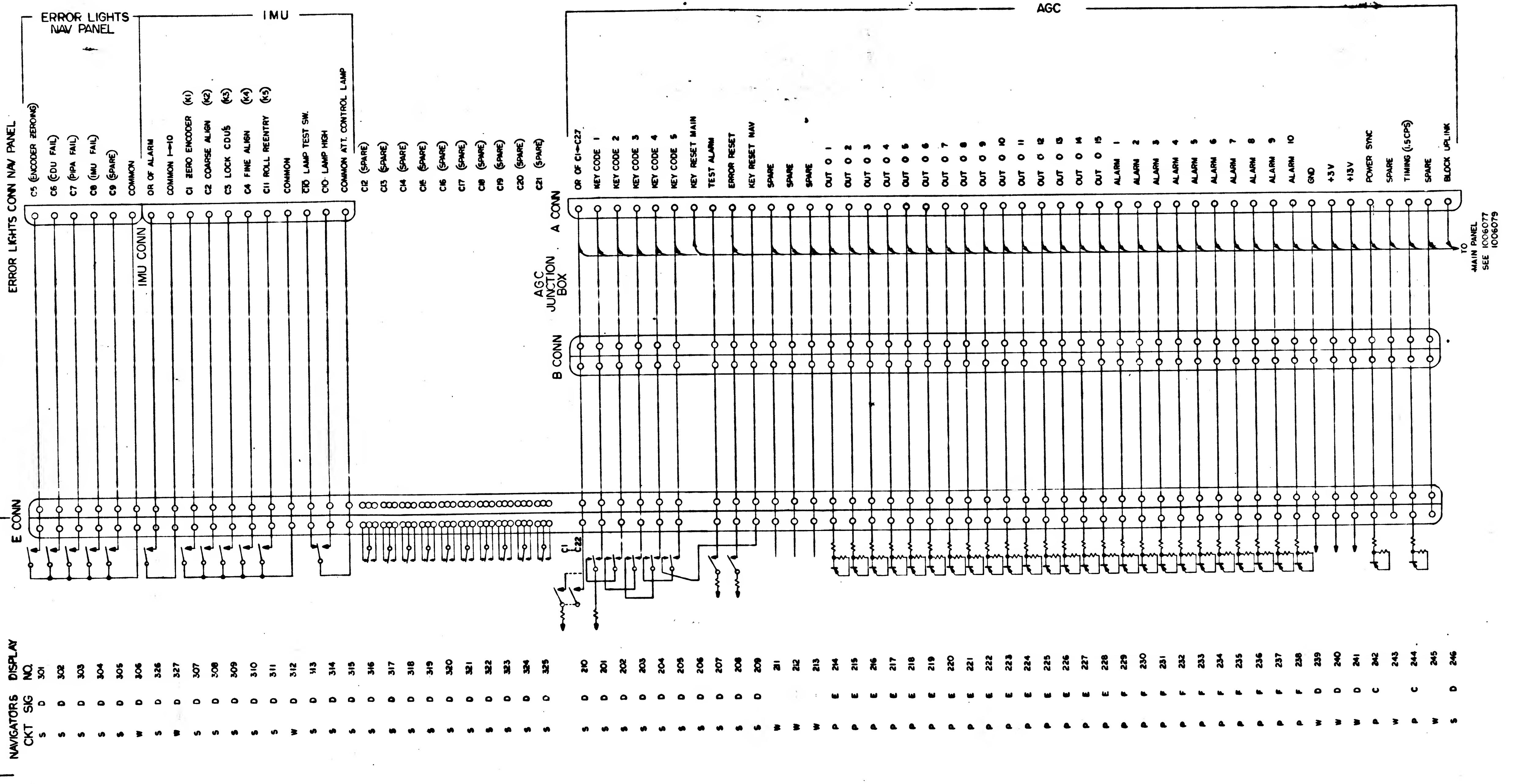
REVISIONS TDRR 00737			
SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822	[illegible]	[illegible]

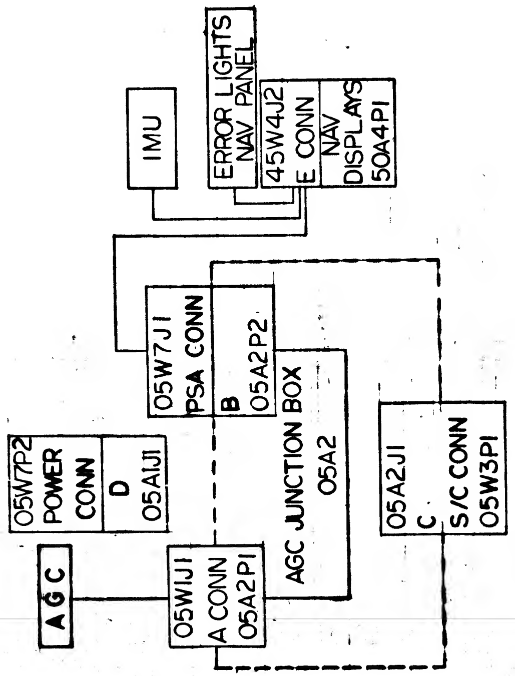
AGC INTERFACE
NAV PANEL DISPLAY



Signal	NAV DISPLAY DISPLAY NO.	NAVIGATORS SIG	NAVIGATORS CKT
C5 (ENCODER ZEROING)	301	D	S
C6 (CDU FAIL)	302	D	S
C7 (PIPA FAIL)	303	D	S
C8 (IMU FAIL)	304	D	S
C9 (SPARE)	305	D	S
COMMON	306	D	W
OR OF ALARM	326	D	S
COMMON 1→10	327	D	W
C1 ZERO ENCODER (K1)	307	D	S
C2 COARSE ALIGN (K2)	308	D	S
C3 LOCK CDUS (K3)	309	D	S
C4 FINE ALIGN (K4)	310	D	S
C11 ROLL REENTRY (K5)	311	D	S
COMMON	312	D	W
C10 LAMP TEST SW.	313	D	S
C10 LAMP HIGH	314	D	S
COMMON ATT. CONTROL LAMP	315	D	S
C12 (SPARE)	316	D	S
C13 (SPARE)	317	D	S
C14 (SPARE)	318	D	S
C15 (SPARE)	319	D	S
C16 (SPARE)	320	D	S
C17 (SPARE)	321	D	S
C18 (SPARE)	322	D	S
C19 (SPARE)	323	D	S
C20 (SPARE)	324	D	S
C21 (SPARE)	325	D	S
OR OF C1→C27	210	D	S
KEY CODE 1	201	D	S
KEY CODE 2	202	D	S
KEY CODE 3	203	D	S
KEY CODE 4	204	D	S
KEY CODE 5	205	D	S
KEY RESET MAIN	206	D	S
TEST ALARM	207	D	S
ERROR RESET	208	D	S
KEY RESET NAV	209	D	S
SPARE	211		W
SPARE	212		W
SPARE	213		W
OUT O 1	214	E	P
OUT O 2	215	E	P
OUT O 3	216	E	P
OUT O 4	217	E	P
OUT O 5	218	E	P
OUT O 6	219	E	P
OUT O 7	220	E	P
OUT O 8	221	E	P
OUT O 9	222	E	P
OUT O 10	223	E	P
OUT O 11	224	E	P
OUT O 12	225	E	P
OUT O 13	226	E	P
OUT O 14	227	E	P
OUT O 15	228	E	P
ALARM 1	229	F	P
ALARM 2	230	F	P
ALARM 3	231	F	P
ALARM 4	232	F	P
ALARM 5	233	F	P
ALARM 6	234	F	P
ALARM 7	235	F	P
ALARM 8	236	F	P
ALARM 9	237	F	P
ALARM 10	238	F	P
GND	239	D	W
+3V	240	D	W
+13V	241	D	W
POWER SYNC	242	C	P
SPARE	243		W
TIMING (1.5CPS)	244	C	P
SPARE	245		W
BLOCK UPLINK	246	D	S

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUTPUT BITS / INPUT BITS
- F ALARM DETECTION
- G COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
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HEAT TREATMENT —
FINAL FINISH —

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DRAWN Tom Gibbons DATE 22 APR 63
CHECKED K E Brown 4/63
APPROVAL Donald J Bowles 4/1/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006080
SCALE — | WT | SHEET 1 OF 1

INCHES
0 1 2
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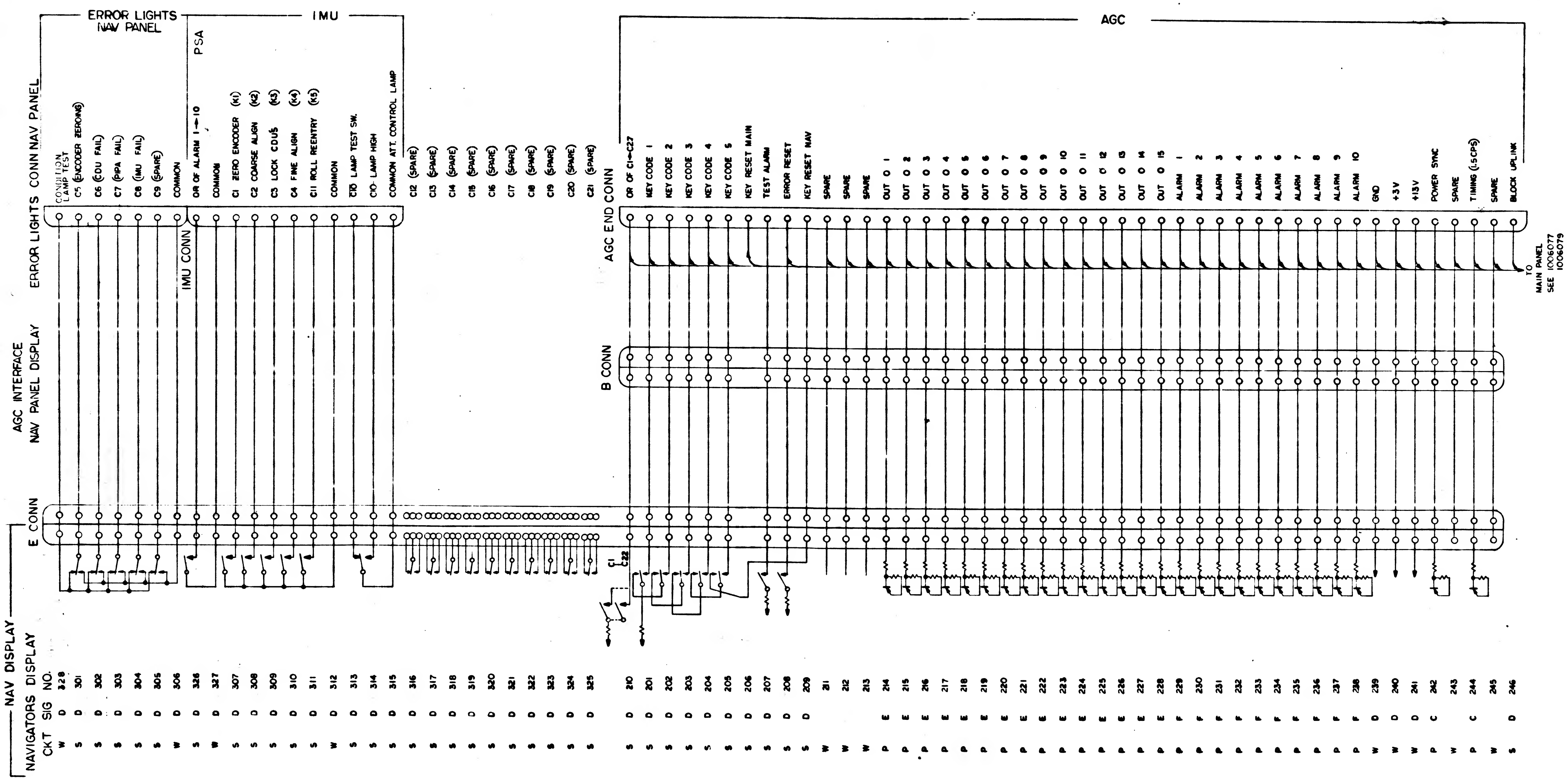
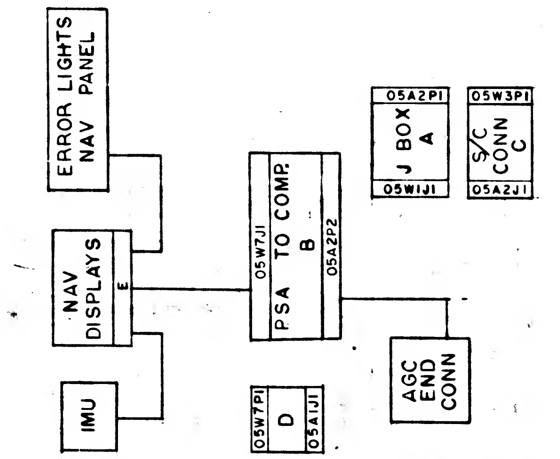
REVISIONS TDRR 00727			
SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822		
B	CHANGED PER TDRR 01574		



NAVIGATORS DISPLAY CKT	SIG	NO.	
W	D	328	CONDITION LAMP TEST
S	D	301	C5 (ENCODER ZEROING)
S	D	302	C6 (CDU FAIL)
S	D	303	C7 (PIPA FAIL)
S	D	304	C8 (IMU FAIL)
S	D	305	C9 (SPARE)
W	D	306	COMMON
S	D	326	OR OF ALARM 1→10
W	D	327	COMMON
S	D	307	C1 ZERO ENCODER (K1)
S	D	308	C2 COARSE ALIGN (K2)
S	D	309	C3 LOCK CDUS (K3)
S	D	310	C4 FINE ALIGN (K4)
S	D	311	C11 ROLL REENTRY (K5)
W	D	312	COMMON
S	D	313	C10 LAMP TEST SW.
S	D	314	C10 LAMP HIGH
S	D	315	COMMON ATT. CONTROL LAMP
S	D	316	C12 (SPARE)
S	D	317	C13 (SPARE)
S	D	318	C14 (SPARE)
S	D	319	C15 (SPARE)
S	D	320	C16 (SPARE)
S	D	321	C17 (SPARE)
S	D	322	C18 (SPARE)
S	D	323	C19 (SPARE)
S	D	324	C20 (SPARE)
S	D	325	C21 (SPARE)
S	D	210	OR OF C1→C27
S	D	201	KEY CODE 1
S	D	202	KEY CODE 2
S	D	203	KEY CODE 3
S	D	204	KEY CODE 4
S	D	205	KEY CODE 5
S	D	206	KEY RESET MAIN
S	D	207	TEST ALARM
S	D	208	ERROR RESET
S	D	209	KEY RESET NAV
W		211	SPARE
W		212	SPARE
W		213	SPARE
P	E	214	OUT O 1
P	E	215	OUT O 2
P	E	216	OUT O 3
P	E	217	OUT O 4
P	E	218	OUT O 5
P	E	219	OUT O 6
P	E	220	OUT O 7
P	E	221	OUT O 8
P	E	222	OUT O 9
P	E	223	OUT O 10
P	E	224	OUT O 11
P	E	225	OUT O 12
P	E	226	OUT O 13
P	E	227	OUT O 14
P	E	228	OUT O 15
P	F	229	ALARM 1
P	F	230	ALARM 2
P	F	231	ALARM 3
P	F	232	ALARM 4
P	F	233	ALARM 5
P	F	234	ALARM 6
P	F	235	ALARM 7
P	F	236	ALARM 8
P	F	237	ALARM 9
P	F	238	ALARM 10
W	D	239	GND
W	D	240	+3V
W	D	241	+13V
P	C	242	POWER SYNC
W		243	SPARE
P	C	244	TIMING (1.5CPS)
W		245	SPARE
S	D	246	BLOCK UPLINK

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

A CONTROLLED RATE
B DISCRETE RATE
C FIXED FREQUENCY
D DC
E OUTPUT BITS/INPUT BITS
F ALARM DETECTION
G COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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FINAL FINISH —

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APPROVAL
NASA APPROVAL
MIT APPROVAL

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AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006080
SCALE — WT SHEET 1 OF 1

1006080 B

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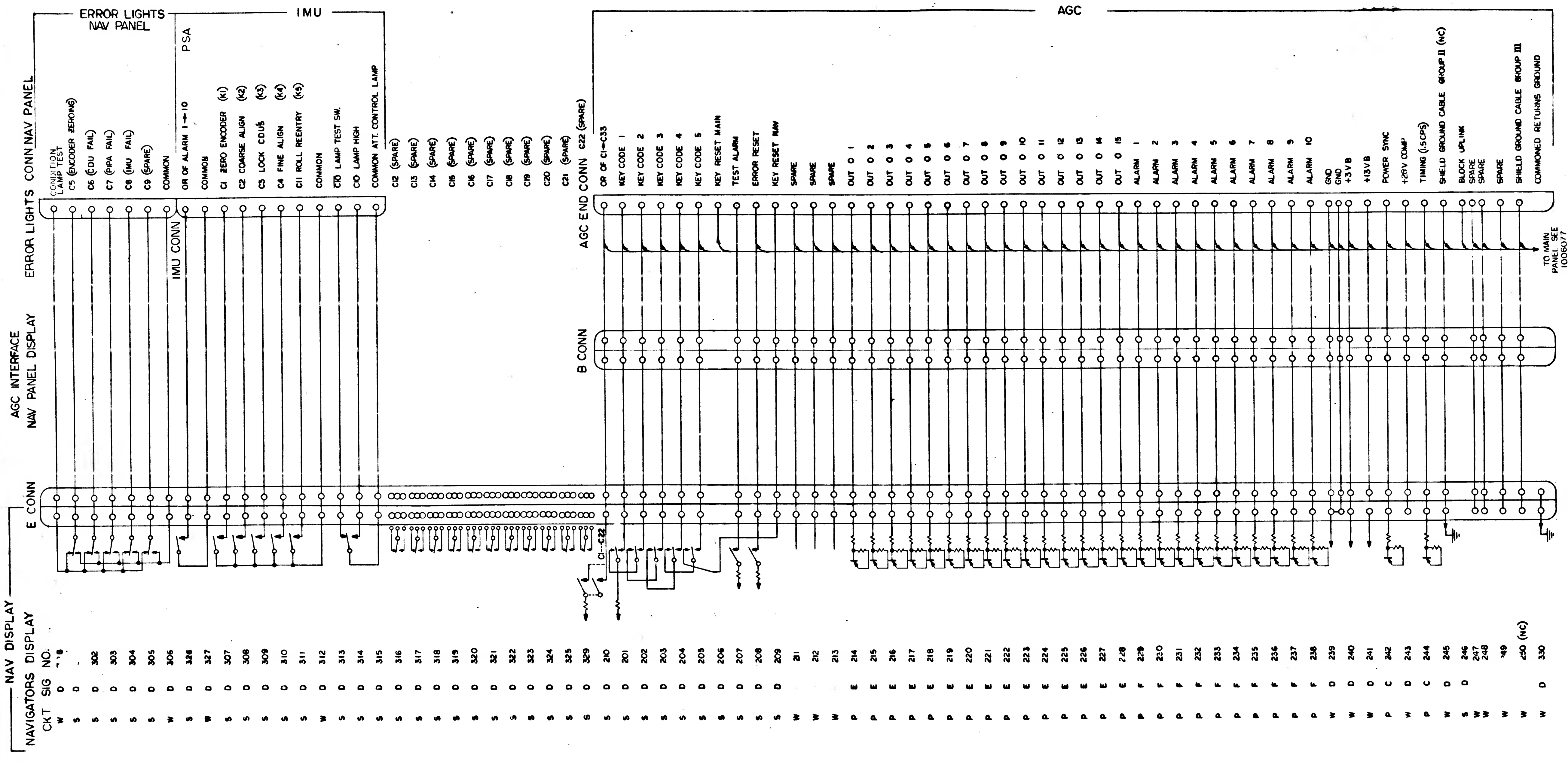
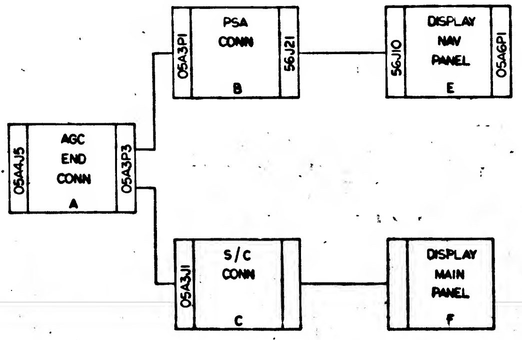
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822	[illegible]	[illegible]
B	CHANGED PER TDRR 01574	6-12-63	DJB
C	CHANGED PER TDRR 0315	9-12-63	RPL



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

A CONTROLLED RATE
B DISCRETE RATE
C FIXED FREQUENCY
D DC
E OUTPUT BITS/INPUT BITS
F ALARM DETECTION
G COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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DRAWN [illegible] DATE 25 MAR 63
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APPROVAL Donald J Bowler 4/1/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

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AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006080
SCALE — WT SHEET 1 OF 1

1006080 C

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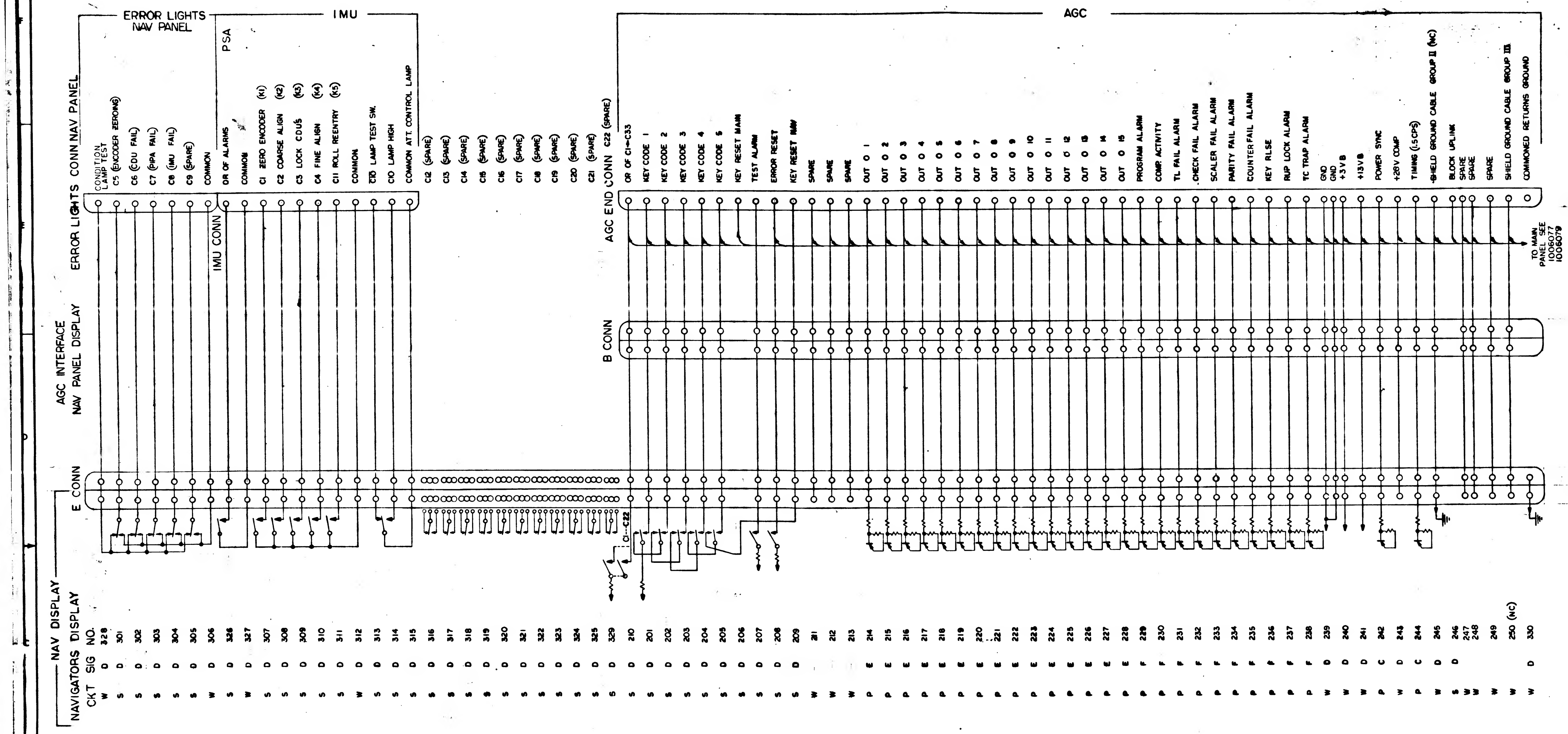
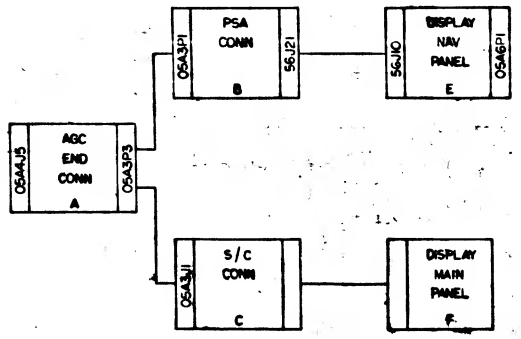
REVISIONS TDRR 00737

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822	4-9-63	WK
B	CHANGED PER TDRR 01574	6-12-63	DJB
C	CHANGED PER TDRR 03115	9-10-63	KPL WK
D	CHANGED PER TDRR 04037	10-17-63	WK



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ DENOTES SIGNAL GND, NOT CASE GND



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUTPUT BITS/INPUT BITS
- F ALARM DETECTION
- G COUNTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
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MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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DRAWN Tom Gibson DATE 25 MAR 63
CHECKED K.E. Bowman 4/63
APPROVAL Donald J. Bowler 4/1/63
APPROVAL Eldon C. Hall 4/1/63
NASA APPROVAL
MIT APPROVAL 3 Apr 63

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AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006080
SCALE — | WT | SHEET 1 OF 1

1006080 D

MASTER

INCHES
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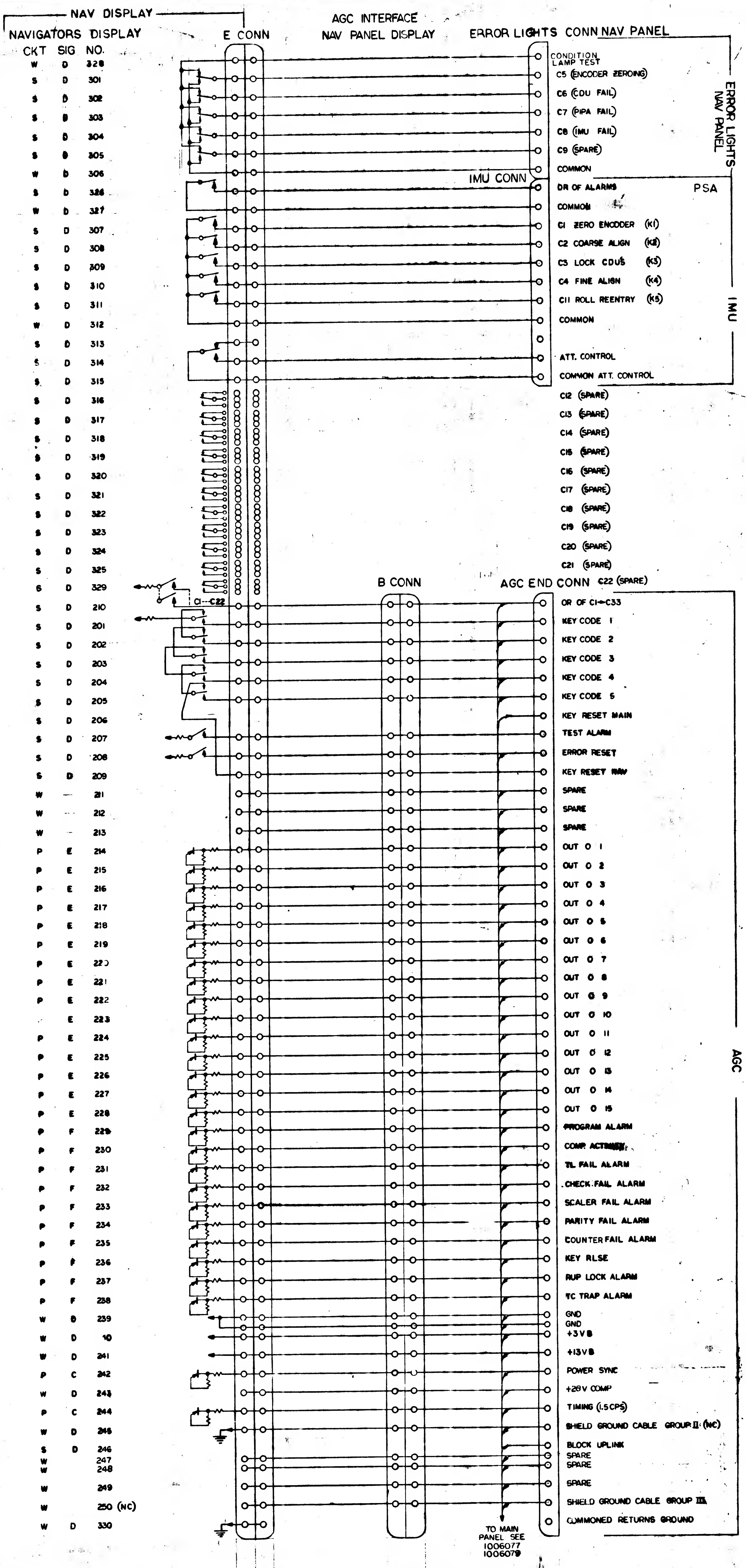
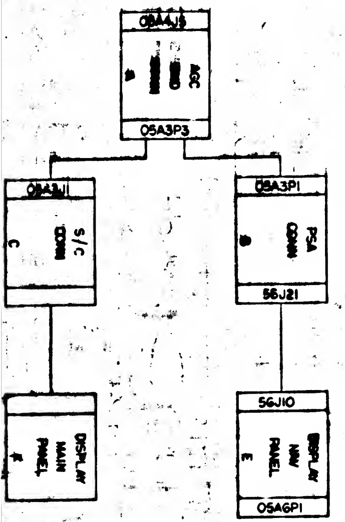
SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822	[illegible]	[illegible]
B	CHANGED PER TDRR 01574	6-10-63	DJB [illegible]
C	CHANGED PER TDRR 03115	[illegible]	CRL [illegible]
D	CHANGED PER TDRR 04037	10-17-63	[illegible]
E	REVISED PER TDRR 04977	12-10-63	[illegible]

REVISIONS TDRR 00727



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ~~SYMBOL ⏚ DENOTES~~ [illegible]



	CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER	OUTPUT	1006009
Y	TRANSFORMER	INPUT	1006087
R	RESISTANCE	INPUT/OUTPUT	1006088
K	MICROLOGIC	INPUT	1006088
T	TRANSISTOR	OUTPUT	1006088
W	WIRE	INPUT/OUTPUT	N/A
S	SWITCH CLOSURE		1006089
P	TRANSISTOR	INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUTPUT BITS / INPUT BITS
- F ALARM DETECTION
- G COUNTER

XPDNC

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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CHECKED K.E. [illegible] 4/63
APPROVAL Donald J. [illegible] 4/1/63
APPROVAL [illegible] C. [illegible]
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

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AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006080
SCALE — WT SHEET 1 OF 1

1006080 E

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REVISIONS TDRR 00727

SYM	DESCRIPTION	DATE	APPROVAL
A	CHANGED PER TDRR 00822	[illegible]	WK
B	CHANGED PER TDRR 01574	4-18-63	DJB [illegible]
C	CHANGED PER TDRR 03115	[illegible]	KPL WK
D	CHANGED PER TDRR 04637	10-17-6[illegible]	WK
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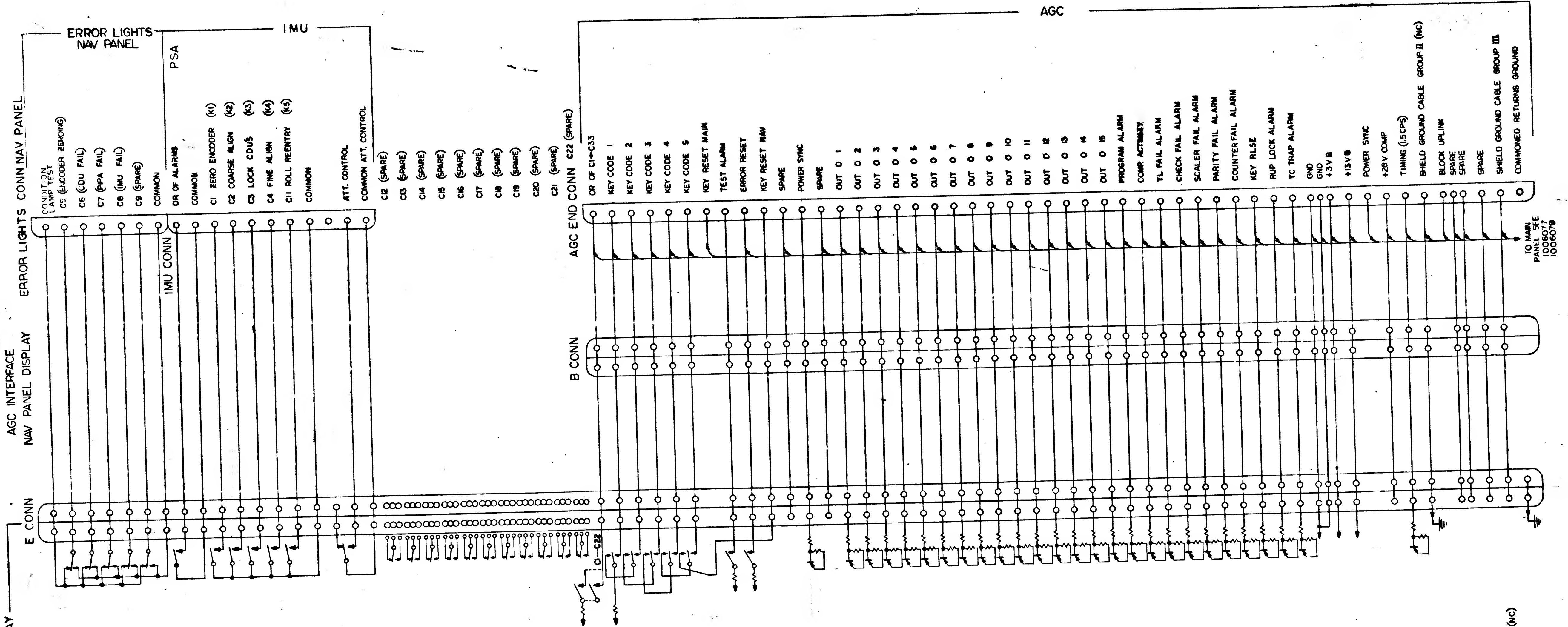

NAV DISPLAY

NAVIGATORS DISPLAY

CKT	SIG	NO.
W	D	328
S	D	301
S	D	302
S	D	303
S	D	304
S	D	305
W	D	306
S	D	326
W	D	327
S	D	307
S	D	308
S	D	309
S	D	310
S	D	311
W	D	312
S	D	313
S	D	314
S	D	315
S	D	316
S	D	317
S	D	318
S	D	319
S	D	320
S	D	321
S	D	322
S	D	323
S	D	324
S	D	325
S	D	329
S	D	210
S	D	201
S	D	202
S	D	203
S	D	204
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S	D	209
W		211
T	C	212
W		213
P	E	214
P	E	215
P	E	216
P	E	217
P	E	218
P	E	219
P	E	220
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P	E	223
P	E	224
P	E	225
P	E	226
P	E	227
P	E	228
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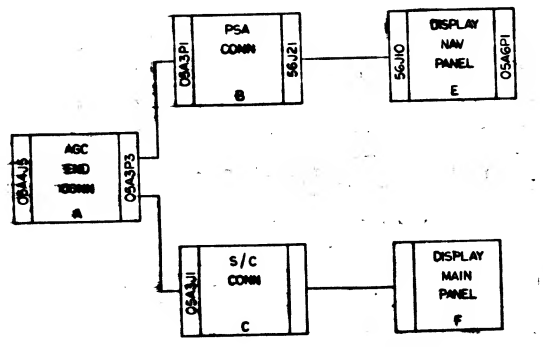
P	F	230
P	F	231
P	F	232
P		233
P	F	234
P	F	235
P	F	236
P	F	237
P	F	238
W	D	239
W	D	240
W	D	241
P	C	242
W	D	243
P	C	244
W	D	245
S	D	246
W		247
W		248
W		249
W		250 (NC)
W	D	330

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SYMBOL ⏚ ~~DENOTES~~ [illegible]



CIRCUIT TYPE		DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
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- C FIXED FREQUENCY
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DRAWN [illegible] DATE 25 MAR 63
CHECKED K E B[illegible] 4/63
APPROVAL Donald J Bowler 4/1/63
APPROVAL Eldon C Hall 4/[illegible]
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 3 Apr 63

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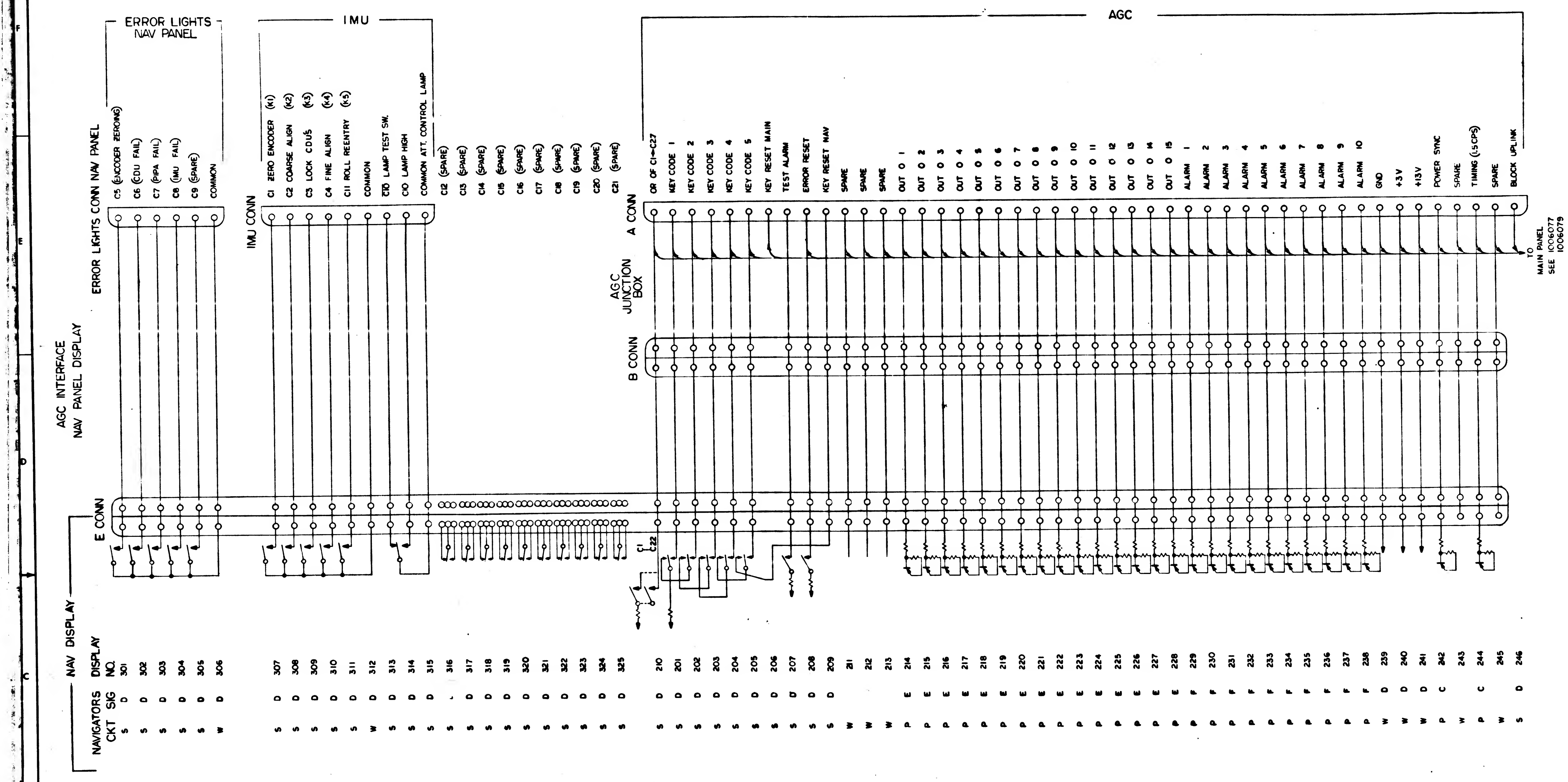
AGC INTERFACE
NAV PANEL DISPLAY

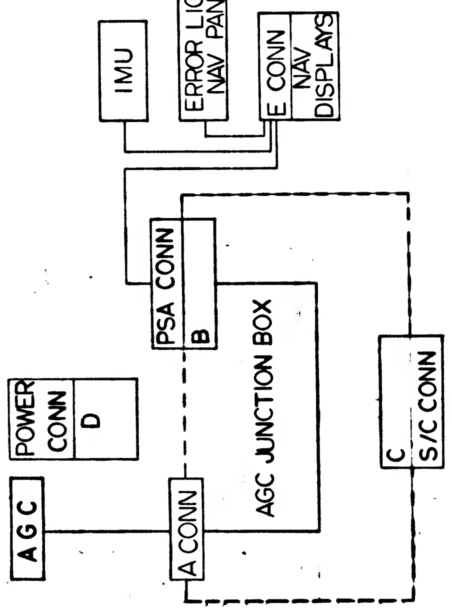
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006080
SCALE —
WT
SHEET 1 OF 1

MASTER



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327



	CIRCUIT TYPE	DRAWING NO.
X	TRANSFORMER OUTPUT	1006009
Y	TRANSFORMER INPUT	1006087
R	RESISTANCE INPUT/OUTPUT	1006088
K	MICROLOGIC INPUT	1006088
T	TRANSISTOR OUTPUT	1006088
W	WIRE INPUT/OUTPUT	N/A
S	SWITCH CLOSURE	1006089
P	TRANSISTOR INPUT	1006089

SIGNAL TYPE

- A CONTROLLED RATE
- B DISCRETE RATE
- C FIXED FREQUENCY
- D DC
- E OUTPUT BITS/INPUT BITS
- F ALARM DETECTION
- G COUNTER

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN Tom Gilbreath DATE 25 APR 63
CHECKED K.E. Brown 4/63
APPROVAL Donald J. Bowler 4/1/63
APPROVAL Eldon C Hall 4/4/63
NASA APPROVAL
MIT APPROVAL V Kupfer 3 Jun 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC INTERFACE
NAV PANEL DISPLAY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006080
SCALE — WT SHEET 1 OF 1

1006080

INCHES
PHOTOGRAPHIC SCALE ONLY

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REVISIONS TDRR 01811			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02841	8-26-63	RPR

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
FC601	1006552	MQ1
FC602	1006552	$\overline{\text{MQ2}}$
FC603	1006552	MB2
FT604	1006549	MT01
FT605	1006549	MT02
FT606	1006549	MT03
FT607	1006549	MT04
FT608	1006549	MT05
FT609	1006549	MT06
FT610	1006549	MT07
FT611	1006549	MT08
FT612	1006549	MT09
FT613	1006549	MT10
FT614	1006549	MT11
FT615	1006549	MT12
FJ616	1006540	MWL01
FJ617	1006540	MWL02
FJ618	1006540	MWL03
FT619	1006540	MWL04
FJ620	1006540	MWL05
FJ621	1006540	MWL06
FJ622	1006540	MWL07
FJ623	1006540	MWL08
FJ624	1006540	MWL09
FJ625	1006540	MWL10
FJ626	1006540	MWL11
FJ627	1006540	MWL12
FJ628	1006540	MWL13
FJ629	1006540	MWL14
FJ630	1006540	MWL15
FJ631	1006540	MWL16
FJ632	1006543	MPARBS
FK633	1006543	MPGT
FK634	1006542	MWAG
FK635	1006542	$\overline{\text{MWALPG}}$
FK636	1006542	MWZG
FK637	1006544	$\overline{\text{MWXG}}$
FK638	1006542	MWYG
FK639	1006542	$\overline{\text{MRUG}}$
FK640	1006542	$\overline{\text{MWBG}}$

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
FK641	1006542	MWQG
FK642	1006551	$\overline{\text{MWSG}}$
FK643	1006542	MRGG
FK644	1006542	$\overline{\text{MWG1}}$
FK645	1006542	$\overline{\text{MWG2}}$
FK646	1006542	$\overline{\text{MWG3}}$
FK647	1006542	$\overline{\text{MWG4}}$
FK648	1006542	MWG5
FK649	1006542	$\overline{\text{MWG6}}$
FK650	1006555	MNISQ
FH651	1006546	MLINC
FH652	1006546	MMINC
FH653	1006546	MOINC
FH654	1006546	MPINC
FH655	1006546	MSHANC
FH656	1006546	MSHINC
FK657	1006554	MSQ13
FK658	1006554	MSQ14
FK659	1006554	MSQ15
FK660	1006554	MSQ16
FK661	1006554	MST1
FK662	1006554	MST2
FK663	1006554	MIIP
FK664	1006554	MBR2
FK665	1006545	MBR1
FK666	1006545	$\overline{\text{MTCSA}}$
FH667	1006550	MRPTR
FK668	1006556	$\overline{\text{MRRPA}}$
FK669	1006544	$\overline{\text{MWBKG}}$
FH670	1006546	MCTROR
FK671	1006546	$\overline{\text{MRCA}}$
FJ672	1006558	$\overline{\text{MPAL}}$
FK673	1006552	$\overline{\text{MSTPIT}}$
FK675	1006542	MWLPG
FK676	1006552	MGOJAM
FK677	1006554	MINHL
FT678	1006547	M25CPS
FH679	1006546	MINKL
WD680	NA	+13V
WD681	NA	+3V
WD683	NA	GRND
FJ710	1006558	MRPTAL
FJ711	1006558	MTCAL
FJ712	1006558	MCTRAL
W-713	1006140	MTLO
W-714	1006140	MTHI

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
BJ684	1006540	MDT01
BJ685	1006540	MDT02
BJ686	1006540	MDT03
BJ687	1006540	MDT04
BJ688	1006540	MDT05
BJ689	1006540	MDT06
BJ690	1006540	MDT07
BJ691	1006540	MDT08
BJ692	1006540	MDT09
BJ693	1006540	MDT10
BJ694	1006540	MDT11
BJ695	1006540	MDT12
BJ696	1006540	MDT13
BJ697	1006540	MDT14
BJ698	1006540	MDT15
BJ699	1006540	MDT16
BK700	1006546	MLOAD
BK701	1006546	MREAD
BK702	1006552	MSBSTP
BK703	1006552	MSTP
BK704	1006552	MSTRT
BK705	1006554	MTCSAI
BK706	1006554	MNHRPT
BK707	1006546	MNHNC
BK708	1006098	CNTRL1
BK709	1006098	CNTRL2

CIRCUIT TYPE

W	WIRE INPUT/OUTPUT
F	COLLECTOR OF FAN-IN GATE NASA DWG 1006013
B	BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

C	FIXED FREQUENCY
H	INCREMENT
J	DATA
K	CONTROL
T	TIMING
D	DC LEVEL

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN ______ DATE ______
CHECKED ______
APPROVAL ______
APPROVAL ______
NASA APPROVAL ______ 7/2/63
MIT APPROVAL ______ 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006081
SCALE | WT | SHEET OF

1006081 A

INCHES 0 1 2
PHOTOGRAPHIC SCALE ONLY

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REVISIONS TDRR 01811			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02847	8-26-63	RPK
B	REVISED PER TDRR 03136	9-13-63	RPK

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
FC601	1006552	MQ1
FC602	1006552	$\overline{\text{MQ2}}$
FC603	1006552	MB2
FT604	1006549	MT01
FT605	1006549	MT02
FT606	1006549	MT03
FT607	1006549	MT04
FT608	1006549	MT05
FT609	1006549	MT06
FT610	1006549	MT07
FT611	1006549	MT08
FT612	1006549	MT09
FT613	1006549	MT10
FT614	1006549	MT11
FT615	1006549	MT12
FJ616	1006540	MWL01
FJ617	1006540	MWL02
FJ618	1006540	MWL03
FT619	1006540	MWL04
FJ620	1006540	MWL05
FJ621	1006540	MWL06
FJ622	1006540	MWL07
FJ623	1006540	MWL08
FJ624	1006540	MWL09
FJ625	1006540	MWL10
FJ626	1006540	MWL11
FJ627	1006540	MWL12
FJ628	1006540	MWL13
FJ629	1006540	MWL14
FJ630	1006540	MWL15
FJ631	1006540	MWL16
FJ632	1006543	MPARBS
FK633	1006543	MPGT
FK634	1006542	MWAG
FK635	1006542	$\overline{\text{MWALPG}}$
FK636	1006542	MWZG
FK637	1006544	$\overline{\text{MWXG}}$
FK638	1006542	MWYG
FK639	1006542	$\overline{\text{MRUG}}$
FK640	1006542	$\overline{\text{MWBG}}$

AGC OUTPUTS TO CTS

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FK643	1006542	MRGG
FK644	1006542	$\overline{\text{MWG1}}$
FK645	1006542	$\overline{\text{MWG2}}$
FK646	1006542	$\overline{\text{MWG3}}$
FK647	1006542	$\overline{\text{MWG4}}$
FK648	1006542	MWG5
FK649	1006542	$\overline{\text{MWG6}}$
FK650	1006555	MNISQ
FH651	1006546	MLINC
FH652	1006546	MMINC
FH653	1006546	MOINC
FH654	1006546	MPINC
FH655	1006546	MSHANC
FH656	1006546	MSHINC
FK657	1006554	MSQ13
FK658	1006554	MSQ14
FK659	1006554	MSQ15
FK660	1006554	MSQ16
FK661	1006554	MST1
FK662	1006554	MST2
FK663	1006554	MIIP
FK664	1006554	MBR2
FK665	1006545	MBR1
FK666	1006545	$\overline{\text{MTCSA}}$
FH667	1006550	MRPTR
FK668	1006556	$\overline{\text{MRRPA}}$
FK669	1006544	$\overline{\text{MWBKG}}$
FH670	1006546	MCTROR
FK671	1006546	$\overline{\text{MRCA}}$
FJ672	1006559	$\overline{\text{MPAL}}$
FK673	1006552	$\overline{\text{MSTPIT}}$
FK675	1006542	MWLPG
FK676	1006552	MGOJAM
FK677	1006554	MINHL
FT678	1006547	M25CPS
FH679	1006546	MINKL
WD680	NA	+13V
WD681	NA	+3V
WD683	NA	GRND
FJ710	1006559	MRPTAL
FJ711	1006559	MTCAL
FJ712	1006559	MCTRAL
W-713	1006140	MTLO
W-714	1006140	MTHI

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BJ692	1006540	MDT09
BJ693	1006540	MDT10
BJ694	1006540	MDT11
BJ695	1006540	MDT12
BJ696	1006540	MDT13
BJ697	1006540	MDT14
BJ698	1006540	MDT15
BJ699	1006540	MDT16
BK700	1006546	MLOAD
BK701	1006546	MREAD
BK702	1006552	MSBSTP
BK703	1006552	MSTP
BK704	1006552	MSTRT
BK705	1006554	MTCSAI
BK706	1006554	MNHRPT
BK707	1006546	MNHNC
BK708	1006098	CNTRL1
BK709	1006098	CNTRL2

CIRCUIT TYPE

W	WIRE INPUT/OUTPUT
F	COLLECTOR OF FAN-IN GATE NASA DWG 1006013
B	BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

C	FIXED FREQUENCY
H	INCREMENT
J	DATA
K	CONTROL
T	TIMING
D	DC LEVEL

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN DATE
CHECKED
APPROVAL
APPROVAL Roe Hall
NASA APPROVAL 7/1/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006081
SCALE
WT
SHEET OF

05

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006081 A

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REVISIONS TDRR 01811

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02841	8-26-63	RPK
B	REVISED PER TDRR 03136	9-13-63	RPK WK
C	REVISED PER TDRR 03598	10-3-63	RPK WK

AGC OUTPUTS TO CTS

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FT611	1006549	MT08
FT612	1006549	MT09
FT613	1006549	MT10
FT614	1006549	MT11
FT615	1006549	MT12
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FJ617	1006540	MWL02
FJ618	1006540	MWL03
FT619	1006540	MWL04
FJ620	1006540	MWL05
FJ621	1006540	MWL06
FJ622	1006540	MWL07
FJ623	1006540	MWL08
FJ624	1006540	MWL09
FJ625	1006540	MWL10
FJ626	1006540	MWL11
FJ627	1006540	MWL12
FJ628	1006540	MWL13
FJ629	1006540	MWL14
FJ630	1006540	MWL15
FJ631	1006540	MWL16
FJ632	1006543	MPARBS
FK633	1006543	MPOT
FK634	1006542	MWAG
FK635	1006542	MWALPG
FK636	1006542	MWZG
FK637	1006544	MWXG
FK638	1006542	MWYG
FK639	1006542	MRUG
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FK646	1006542	$\overline{\text{MWG3}}$
FK647	1006542	$\overline{\text{MWG4}}$
FK648	1006542	MWG5
FK649	1006542	$\overline{\text{MWG6}}$
FK650	1006555	MNISQ
FH651	1006546	MLINC
FH652	1006546	MMINC
FH653	1006546	MOINC
FH654	1006546	MPINC
FH655	1006546	MSHANC
FH656	1006546	MSHINC
FK657	1006554	MSQ13
FK658	1006554	MSQ14
FK659	1006554	MSQ15
FK660	1006554	MSQ16
FK661	1006554	MST1
FK662	1006554	MST2
FK663	1006554	MIIP
FK664	1006554	MBR2
FK665	1006545	MBR1
FK666	1006545	$\overline{\text{MTCSA}}$
FH667	1006550	MRPTR
FK668	1006556	$\overline{\text{MRRPA}}$
FK669	1006544	MWBKG
FH670	1006546	MCTROR
FK671	1006546	$\overline{\text{MRCA}}$
FJ672	1006559	$\overline{\text{MPAL}}$
FK673	1006552	$\overline{\text{MSTPIT}}$
FK675	1006542	MWLPG
FK676	1006552	MGOJAM
FK677	1006554	MINHL
FT678	1006547	M25CPS
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FJ711	1006559	MTCAL
FJ712	1006559	MCTRAL
W-713	1006140	MTLO
W-714	1006140	MTHI
FJ715	1006544	$\overline{\text{MBAL}}$
FC716	1006552	MD2

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
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BJ686	1006540	MDT03
BJ687	1006540	MDT04
BJ688	1006540	MDT05
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BJ695	1006540	MDT12
BJ696	1006540	MDT13
BJ697	1006540	MDT14
BJ698	1006540	MDT15
BJ699	1006540	MDT16
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BK701	1006546	MREAD
BK702	1006552	MSBSTP
BK703	1006552	MSTP
BK704	1006552	MSTRT
BK705	1006554	MTCSAI
BK706	1006554	MNHRPT
BK707	1006546	MNHNC
BK708	1006098	CNTRL1
BK709	1006098	CNTRL2

CIRCUIT TYPE

W	WIRE INPUT/OUTPUT
F	COLLECTOR OF FAN-IN GATE NASA DWG 1006013
B	BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

C	FIXED FREQUENCY
H	INCREMENT
J	DATA
K	CONTROL
T	TIMING
D	DC LEVEL

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN ______ DATE ______
CHECKED ______
APPROVAL ______
APPROVAL ______
NASA APPROVAL 7/2/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006081
SCALE | WT | SHEET OF

1006081 C

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REVISIONS TDRR 01811

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02847	8-26-63	RPR
B	REVISED PER TDRR 03136	9-13-63	RPR WK
C	REVISED PER TDRR 03598	10-3-63	RPR WK
D	REVISED PER TDRR 04522	11-6-63	WK

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FC601	1006552	R020	MQ1
FC602	1006552	R021	$\overline{\text{MQ2}}$
FC603	1006552	R002	MB2
FT604	1006549	R039	MT01
FT605	1006549	R040	MT02
FT606	1006549	R041	MT03 -NU
FT607	1006549	R042	MT04 -NU
FT608	1006549	R043	MT05 -NU
FT609	1006549	R044	MT06 -NU
FT610	1006549	R045	MT07
FT611	1006549	R046	MT08 -NU
FT612	1006549	R047	MT09 -NU
FT613	1006549	R048	MT10
FT614	1006549	R049	MT11
FT615	1006549	R050	MT12
FJ616	1006540	L031	MWL01
FJ617	1006540	L032	MWL02
FJ618	1006540	L033	MWL03
FT619	1006540	L034	MWL04
FJ620	1005540	L035	MWL05
FJ621	1006540	L036	MWL06
FJ622	1006540	L037	MWL07
FJ623	1006540	L038	MWL08
FJ624	1006540	L039	MWL09
FJ625	1006540	L040	MWL10
FJ626	1006540	L041	MWL11
FJ627	1006540	L042	MWL12
FJ628	1006540	L043	MWL13
FJ629	1006540	L044	MWL14
FJ630	1006540	L045	MWL15
FJ631	1006540	L046	MWL16
FJ632	1006543	L017	MPARBS
FK633	1006543	L018	MPGT
FK634	1006542	L021	MWAG
FK635	1006542	L022	MWALPG
FK636	1006542	L050	MWZG
FK637	1006544	R056	MWX6
FK638	1006542	L049	MWYG
[illegible]	[illegible]		[illegible]
FK640	1006542	L023	$\overline{\text{MWBG}}$

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FK641	1006542	L048	MWQG
FK642	1006551	R055	$\overline{\text{MWSG}}$
FK643	1006542	L019	MRGG
FK644	[illegible]		[illegible]
FK645	1006542		[illegible]
FK646	1006542		[illegible]
FK647	1006542	L027	$\overline{\text{MWG4}}$
FK648	1006542	L028	MWG5
FK649	1006542	L029	$\overline{\text{MWG6}}$
FK650	1006555	R016	MNISQ
FH651	1006546	R011	MLINC
FH652	1006546	R013	MMINC
FH653	1006546	R017	MOINC
FH654	1006546	R019	MPINC
FH655	1006546	R028	MSHANC
FH656	1006546	R029	MSHINC
FK657	1006554	R030	MSQ13
FK658	1006554	R031	MSQ14
FK659	1006554	R032	MSQ15
FK660	1006554	R033	MSQ16
FK661	1006554	R034	MST1
FK662	1006554	R035	MST2
FK663	1006554	R008	MIIP
FK664	1006554	R004	MBR2
FK665	1006545	R003	MBR1
FK666	1006545	R052	$\overline{\text{MTCSA}}$
FH667	1006550	R025	MRPTR
FK668	[illegible]		[illegible]
FK669	1006544	R054	MWBK6
FH670	1006546	R006	MCTROR
F[illegible]71	1006546		[illegible]
FJ672	1006550	R018	$\overline{\text{MPAL}}$
FK673	1006552	R037	$\overline{\text{MSTPIT}}$
FK675	1006542	L047	MWLPG
FK676	1006552	R007	MGOJAM
FK677	1006554	R009	MINHL
FT678	1006547	R001	M25CPS
FH679	1006546	0	MINKL.
WD680	NA	L062	+13V A
WD681	NA	L061	+3V A
[illegible]			
FJ710	1006599	R024	MRPTAL -NU
FJ711	1006559	R051	MTCAL -NU
FJ712	1006559	R005	MCTRAL -NU
FJ715	1006544	R057	$\overline{\text{MBAL}}$ -NU
FC716	1006552	R058	MO2
FK717	1006559		ALGA
WD683	NA	L065	
WD683	NA	L066	GRND
WD683	NA	L067	
WD683	NA	L068	
WD683	NA	R065	
WD683	NA	R066	GRND
WD683	NA	R067	
WD683	NA	R068	

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
BJ684	1006540	L001	MDT01
BJ685	1006540	L002	MDT02
BJ686	1006540	L003	MDT03
BJ687	1006540	L004	MDT04
BJ688	1006540	L005	MDT05
BJ689	1006540	L006	MDT06
BJ690	1006540	L007	MDT07
BJ691	1006540	L008	MDT08
BJ692	1006540	L009	MDT09
BJ693	1006540	L010	MDT10
BJ694	1006540	L011	MDT11
BJ695	1006540	L012	MDT12
BJ696	1006540	L013	MDT13
BJ697	1006540	L014	MDT14
BJ698	1006540	L015	MDT15
BJ699	1006540	L016	MDT16
BK700	1006546	R012	MLOAD
BK701	1006546	R023	MREAD
BK702	1006552	R027	MSBSTP
BK703	1006552	R036	MSTP
BK704	1006552	R038	MSTRT
BK705	1006554	R053	MTCSAI
BK706	1006554	R015	MNHRPT
BK707	1006546	R014	MNHNC
BK708	[illegible]		CNTRL1
BK709	1006095		CNTRL2

CIRCUIT TYPE

- W WIRE INPUT/OUTPUT
- F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
- B BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

- C FIXED FREQUENCY
- H INCREME
- J DATA
- K CONTROL
- T TIMING
- D DC LEVEL

NOTES:

1. NU NOT USED BY CTS

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN ________ DATE ________
CHECKED ________
APPROVAL ________
APPROVAL ________
NASA APPROVAL 7/2/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006081
SCALE
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006081 D

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REVISIONS TDRR 01811			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02841	8-26-63	EPR
B	REVISED PER TDRR 03136	9-18-63	EPR WK
C	REVISED PER TDRR 03598	10-3-63	EPR WK
D	REVISED PER TDRR 04522	11-6-63	EPR WK
E	REVISED PER TDRR 05102	10 DEC 63	JFN EPR

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FC601	1006552	R020	MQ1
FC602	1006552	R021	$\overline{\text{MQ2}}$
FC603	1006552	R002	MB2
FT604	1006549	R039	MT01
FT605	1006549	R040	MT02
FT606	1006549	R041	MT03 -NU
FT607	1006549	R042	MT04 -NU
FT608	1006549	R043	MT05 -NU
FT609	1006549	R044	MT06
FT610	1006549	R045	MT07
FT611	1006549	R046	MT08
FT612	1006549	R047	MT09 -NU
FT613	1006549	R048	MT10
FT614	1006549	R049	MT11
FT615	1006549	R050	MT12
FJ616	1006540	L031	MWL01
FJ617	1006540	L032	MWL02
FJ618	1006540	L033	MWL03
FT619	1006540	L034	MWL04
FJ620	1006540	L035	MWL05
FJ621	1006540	L036	MWL06
FJ622	1006540	L037	MWL07
FJ623	1006540	L038	MWL08
FJ624	1006540	L039	MWL09
FJ625	1006540	L040	MWL10
FJ626	1006540	L041	MWL11
FJ627	1006540	L042	MWL12
FJ628	1006540	L043	MWL13
FJ629	1006540	L044	MWL14
FJ630	1006540	L045	MWL15
FJ631	1006540	L046	MWL16
FJ632	1006543	L017	MPARBS
FK633	1006543	L018	MPGT
FK634	1006542	L021	MWAG
FK635	1006542	L022	MWALPG
FK636	1006542	L050	MWZG
FK637	1006544	R056	MWXG
FK638	1006542	L049	MWYG
FK640	1006542	L023	MWBG

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FK641	1006542	L048	MWQG
FK642	1006551	R055	MWSG
FK643	1006542	L019	MRGG
FK647	1006542	L027	MWG4
FK648	1006542	L028	MWG5
FK649	1006542	L029	MWG6
FK650	1006555	R016	MNISQ
FH651	1006546	R011	MLINC
FH652	1006546	R013	MMINC
FH653	1006546	R017	MOINC
FH654	1006546	R019	MPINC
FH655	1006546	R028	MSHANC
FH656	1006546	R029	MSHINC
FK657	1006554	R030	MSQ13
FK658	1006554	R031	MSQ14
FK659	1006554	R032	MSQ15
FK660	1006554	R033	MSQ16
FK661	1006554	R034	MST1
FK662	1006554	R035	MST2
FK663	1006554	R008	MIIP
FK664	1006554	R004	MBR2
FK665	1006545	R003	MBR1
FK666	1006545	R052	$\overline{\text{MTCSA}}$
FH667	1006550	R025	MRPTR
FK669	1006544	R054	MWBKG
FH670	1006546	R006	MCTROR
FJ672	1006559	R018	$\overline{\text{MPAL}}$
FK673	1006552	R037	$\overline{\text{MSTPIT}}$
FK675	1006542	L047	MWLPG
FK676	1006552	R007	MGOJAM
FK677	1006554	R009	MINHL
FT678	1006547	R001	M25CPS
FH679	1006546	R01[illegible]	MINKL
WD680	NA	L062	+13V A
WD681	NA	L061	+3V A
FJ710	1006559	R024	MRPTAL -NU
FJ711	1006559	R051	MTCAL -NU
FJ712	1006559	R005	MCTRAL -NU
FJ715	1006544	R057	$\overline{\text{MBAL}}$ -NU
FC716	1006552	R058	MD2
FK717	1006559	R059	ALGA
WD683	NA	L065	GRND
WD683	NA	L066	GRND
WD683	NA	L067	GRND
WD683	NA	L068	GRND
WD683	NA	R065	GRND
WD683	NA	R066	GRND
WD683	NA	R067	GRND
WD683	NA	R068	GRND

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
BJ684	1006540	L001	MDT01
BJ685	1006540	L002	MDT02
BJ686	1006540	L003	MDT03
BJ687	1006540	L004	MDT04
BJ688	1006540	L005	MDT05
BJ689	1006540	L006	MDT06
BJ690	1006540	L007	MDT07
BJ691	1006540	L008	MDT08
BJ692	1006540	L009	MDT09
BJ693	1006540	L010	MDT10
BJ694	1006540	L011	MDT11
BJ695	1006540	L012	MDT12
BJ696	1006540	L013	MDT13
BJ697	1006540	L014	MDT14
BJ698	1006540	L015	MDT15
BJ699	1006540	L016	MDT16
BK700	1006546	R012	MLOAD
BK701	1006546	R023	MREAD
BK702	1006552	R027	MSBSTP
BK703	1006552	R036	MSTP
BK704	1006552	R038	MSTRT
BK705	1006554	R053	MTCSAI
BK706	1006554	R015	MNHRPT
BK707	1006546	R014	MNHNC

CIRCUIT TYPE

W WIRE INPUT/OUTPUT
F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
B BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

C FIXED FREQUENCY
H INCREMENT
J DATA
K CONTROL
T TIMING
D DC LEVEL

NOTES:

1. NU NOT USED BY CTS

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN ______ DATE ______
CHECKED ______
APPROVAL ______
APPROVAL ______
NASA APPROVAL ______ 7/2/63
MIT APPROVAL ______ 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006081
SCALE
WT
SHEET OF

1006081E

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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REVISIONS TDRR 01811

SYM	DESCRIPTION	DATE	APPROVAL
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B	REVISED PER TDRR 03136	9-18-63	RAR WK
C	REVISED PER TDRR 03598	10-3-63	RAR WK
D	REVISED PER TDRR 04522	11-6-63	WK
E	REVISED PER TDRR 05102	5 DEC 63	RAR
F	REVISED PER TDRR 06217	2/14/64	RAR WK

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGMENTS	SIGNAL NAME
FC601	1006552	R020	MQ1
FC602	1006552	R021	$\overline{\text{MQ2}}$
FC603	1006552	R002	MB2
FT604	1006549	R039	MT01
FT605	1006549	R040	MT02
FT606	1006549	R041	MT03 -NU
FT607	1006549	R042	MT04 -NU
FT608	1006549	R043	MT05 -NU
FT609	1006549	R044	MT06
FT610	1006549	R045	MT07
FT611	1006549	R046	MT08
FT612	1006549	R047	MT09 -NU
FT613	1006549	R048	MT10
FT614	1006549	R049	MT11
FT615	1006549	R050	MT12
FJ616	1006540	L031	MWL01
FJ617	1006540	L032	MWL02
FJ618	1006540	L033	MWL03
FT619	1006540	L034	MWL04
FJ620	1006540	L035	MWL05
FJ621	1006540	L036	MWL06
FJ622	1006540	L037	MWL07
FJ623	1006540	L038	MWL08
FJ624	1006540	L039	MWL09
FJ625	1006540	L040	MWL10
FJ626	1006540	L041	MWL11
FJ627	1006540	L042	MWL12
FJ628	1006540	L043	MWL13
FJ629	1006540	L044	MWL14
FJ630	1006540	L045	MWL15
FJ631	1006540	L046	MWL16
FJ632	1006543	L017	MPARBS
FK633	1006543	L018	MPGT
FK634	1006542	L021	MWAG
FK635	1006542	L022	MWALPG
FK636	1006542	L050	MWZG
FK637	1006544	R056	MWXG
FK638	1006542	L049	MWYG
FK640	1006542	L023	$\overline{\text{MWBG}}$

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FK641	1006542	L048	MWQG
FK642	1006551	R055	MWSG
FK643	1006542	L019	MRGG
[illegible]44	[illegible]		[illegible]
F[illegible]45	1006542		[illegible]
FK[illegible]46	1006542		[illegible]
FK647	1006542	L027	$\overline{\text{MWG4}}$
FK648	1006542	L028	MWG5
FK649	1006542	L029	MWG6
FK650	1006555	R016	MNISQ
FH651	1006546	R011	MLINC
FH652	1006546	R013	MMINC
FH653	1006546	R017	MDINC
FH654	1006546	R019	MPINC
FH655	1006546	R028	MSHANC
FH656	1006546	R029	MSHINC
FK657	1006554	R030	MSQ13
FK658	1006554	R031	MSQ14
FK659	1006554	R032	MSQ15
FK660	1006554	R033	MSQ16
FK661	1006554	R034	MST1
FK662	1006554	R035	MST2
FK663	1006554	R008	MIIP
FK664	1006554	R004	MBR2
FK665	1006545	R003	MBR1
FK666	1006545	R052	$\overline{\text{MTCSA}}$
FH667	1006550	R025	MRPTR
F[illegible]69	[illegible]		[illegible]
FK669	1006544	R054	MWBKG
FH670	1006546	R006	MCTROR
F[illegible]71	[illegible]		
FJ672	1006559	R018	$\overline{\text{MPAL}}$
FK673	1006552	R037	$\overline{\text{MSTPIT}}$
FK675	1006542	L047	MWLPG
FK676	1006552	R007	MGOJAM
FK677	1006554	R009	MINHL
FT678	1006547	R001	M25CPS
FH679	1006546	R010	MINKL
WD680	NA	L062	+13V B
WD681	NA	L061	+3V A
FJ710	1006559	R024	MRPTAL -NU
FJ711	1006559	R051	MTCAL -NU
FJ712	1006559	R005	MCTRAL -NU
FJ715	1006544	R057	$\overline{\text{MBAL}}$ -NU
FC716	1006552	R058	MD2
FK717	1006559	R059	ALGA
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WD683	NA	L066	GRND
WD683	NA	L067	GRND
WD683	NA	L068	GRND
WD683	NA	R065	GRND
WD683	NA	R066	GRND
WD683	NA	R067	GRND
WD683	NA	R068	GRND

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
BJ684	1006540	L001	MDT01
BJ685	1006540	L002	MDT02
BJ686	1006540	L003	MDT03
BJ687	1006540	L004	MDT04
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BJ691	1006540	L008	MDT08
BJ692	1006540	L009	MDT09
BJ693	1006540	L010	MDT10
BJ694	1006540	L011	MDT11
BJ695	1006540	L012	MDT12
BJ696	1006540	L013	MDT13
BJ697	1006540	L014	MDT14
BJ698	1006540	L015	MDT15
BJ699	1006540	L016	MDT16
BK700	1006546	R012	MLOAD
BK701	1006546	R023	MREAD
BK702	1006552	R027	MSBSTP
BK703	1006552	R036	MSTP
BK704	1006552	R038	MSTRT
BK705	1006554	R053	MTCSAI
BK706	1006554	R015	MNHRPT
BK707	1006546	R014	MNHNC
[illegible]K708	[illegible]		[illegible]
[illegible]K709	[illegible]		[illegible]

CIRCUIT TYPE

- W WIRE INPUT/OUTPUT
- F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
- B BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

- C FIXED FREQUENCY
- H INCREMENT
- J DATA
- K CONTROL
- T TIMING
- D DC LEVEL

NOTES:

1. NU NOT USED BY CTS

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN ______ DATE ______
CHECKED ______
APPROVAL
APPROVAL
NASA APPROVAL 7/2/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006081
SCALE | WT | SHEET OF

1006081F

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FC601	1006552	R020	MQ1
FC602	1006552	R021	$\overline{\text{MQ2}}$
FC603	1006552	R002	MB2
FT604	1006549	R039	MT01
FT605	1006549	R040	MT02
FT606	1006549	R041	MT03 -NU
FT607	1006549	R042	MT04 -NU
FT608	1006549	R043	MT05 -NU
FT609	1006549	R044	MT06
FT610	1006549	R045	MT07
FT611	1006549	R046	MT08
FT612	1006549	R047	MT09 -NU
FT613	1006549	R048	MT10
FT614	1006549	R049	MT11
FT615	1006549	R050	MT12
FJ616	1006540	L031	MWL01
FJ617	1006540	L032	MWL02
FJ618	1006540	L033	MWL03
FT619	1006540	L034	MWL04
FJ620	1006540	L035	MWL05
FJ621	1006540	L036	MWL06
FJ622	1006540	L037	MWL07
FJ623	1006540	L038	MWL08
FJ624	1006540	L039	MWL09
FJ625	1006540	L040	MWL10
FJ626	1006540	L041	MWL11
FJ627	1006540	L042	MWL12
FJ628	1006540	L043	MWL13
FJ629	1006540	L044	MWL14
FJ630	1006540	L045	MWL15
FJ631	1006540	L046	MWL16
FJ632	1006543	L017	MPARBS
FK633	1006543	L018	MPGT
FK634	1006542	L021	MWAG
FK635	1006542	L022	MWALPG
FK636	1006542	L050	MWZG
FK637	1006544	R056	MWXG
FK638	1006542	L049	MWYG
FK640	1006542	L023	MWBG

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FK641	1006542	L048	MWQG
FK642	1006551	R055	MWSG
FK643	1006542	L019	MRGG
[illegible]	[illegible]		
FK645	[illegible]		
[illegible]	[illegible]		
FK647	1006542	L027	MWG4
FK648	1006542	L028	MWG5
FK649	1006542	L029	MWG6
FK650	1006555	R016	MNISQ
FH651	1006546	R011	MLINC
FH652	1006546	R013	MMINC
FH653	1006546	R017	MOINC
FH654	1006546	R019	MPINC
FH655	1006546	R028	MSHANC
FH656	1006546	R029	MSHINC
FK657	1006554	R030	MSQ13
FK658	1006554	R031	MSQ14
FK659	1006554	R032	MSQ15
FK660	1006554	R033	MSQ16
FK661	1006554	R034	MST1
FK662	1006554	R035	MST2
FK663	10C6554	R008	MIIP
FK664	1006554	R004	MBR2
FK665	1006545	R003	MBR1
FK666	1006545	R052	$\overline{\text{MTCSA}}$
FH667	1006550	R025	MRPTR
FK669	1006544	R054	MWBKG
FH670	1006546	R006	MCTROR
FJ672	100655[illegible]	R018	$\overline{\text{MPAL}}$
FK673	1006552	R037	$\overline{\text{MSTPIT}}$
FK675	1006542	L047	MWLPG
FK676	1006552	R007	MGOJAM
FK677	1006554	R009	MINHL
FT678	1006547	R001	M25CPS
FH679	1006546	R010	MINKL
WD680	NA	L062	+13V B
WD681	NA	L061	+3V A
FJ710	1006559	R024	MRPTAL -NU
FJ711	1006559	R051	MTCAL -NU
FJ712	1006559	R005	MCTRAL -NU
FJ715	1006544	R057	$\overline{\text{MBAL}}$ -NU
FC716	1006552	R058	MD2
AK717	1006559	R059	ALGA
WD683	NA	L065	GRND
WD683	NA	L066	GRND
WD683	NA	L067	GRND
WD683	NA	L068	GRND
WD683	NA	R065	GRND
WD683	NA	R066	GRND
WD683	NA	R067	GRND
WD683	NA	R068	GRND

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
BJ684	1006540	L001	MDT01
BJ685	1006540	L002	MDT02
BJ686	1006540	L003	MDT03
BJ687	1006540	L004	MDT04
BJ688	1006540	L005	MDT05
BJ689	1006540	L006	MDT06
BJ690	1006540	L007	MDT07
BJ691	1006540	L008	MDT08
BJ692	1006540	L009	MDT09
BJ693	1006540	L010	MDT10
BJ694	1006540	L011	MDT11
BJ695	1006540	L012	MDT12
BJ696	1006540	L013	MDT13
BJ697	1006540	L014	MDT14
BJ698	1006540	L015	MDT15
BJ699	1006540	L016	MDT16
BK700	1006546	R012	MLOAD
BK701	1006546	R023	MREAD
BK702	1006552	R027	MSBSTP
BK703	1006552	R036	MSTP
BK704	1006552	R038	MSTRT
BK705	1006554	R053	MTCSAI
BK706	1006554	R015	MNHRPT
BK707	1006546	R014	MNHNC
BK718	1006547	R063	MNHSBF-NU
BK719	1006553	R063	MONPAR-NU

CIRCUIT TYPE

- W WIRE INPUT/OUTPUT
- F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
- B BASE OF MICROLOGIC NASA DWG 1006013
- A COLLECTOR OF NOR GATE NASA DWG 1006013

SIGNAL TYPE

- C FIXED FREQUENCY
- H INCREMENT
- J DATA
- K CONTROL
- T TIMING
- D DC LEVEL

NOTES:

1. NU NOT USED BY CTS

REVISIONS TDRR 0181

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02841	8-26-63	
B	REVISED PER TDRR 03136	9-13-63	
C	REVISED PER TDRR 03598	10-3-63	
D	REVISED PER TDRR 04522	11-6-63	
E	REVISED PER TDRR 05102	10 Dec 63	
F	REVISED PER TDRR 06217	2/14/64	
G	REVISED PER TDRR 07271 DR D.A.Clement CHK	4/24/64	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN DATE
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL 7/2/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006081
SCALE
WT
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 08411			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02841	8-26-63	
B	REVISED PER TDRR 03136	9-13-63	
C	REVISED PER TDRR 03598	10-3-63	
D	REVISED PER TDRR 04522	11-6-63	
E	REVISED PER TDRR 05102	10 DEC 63	
F	REVISED PER TDRR 06217	3/19/64	
G	REVISED PER TDRR 07271 DR D.A. Clement CHK	4/29/64	
H	REVISED PER TDRR 10120 DR W. Jackson CHK R.M.E.	8 Jun 64	HWC

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FC601	1006552	R020	MD1
FC602	1006552	R021	MD2
FC603	1006552	R002	MB2
FT604	1006549	R039	MT01
FT605	1006549	R040	MT02
FT606	1006549	R041	MT03 -NU
FT607	1006549	R042	MT04 -NU
FT608	1006549	R043	MT05 -NU
FT609	1006549	R044	MT06
FT610	1006549	R045	MT07
FT611	1006549	R046	MT08
FT612	1006549	R047	MT09 -NU
FT613	1006549	R048	MT10
FT614	1006549	R049	MT11
FT615	1006549	R050	MT12
FJ616	1006540	L031	MWL01
FJ617	1006540	L032	MWL02
FJ618	1006540	L033	MWL03
FT619	1006540	L034	MWL04
FJ620	1006540	L035	MWL05
FJ621	1006540	L036	MWL06
FJ622	1006540	L037	MWL07
FJ623	1006540	L038	MWL08
FJ624	1006540	L039	MWL09
FJ625	1006540	L040	MWL10
FJ626	1006540	L041	MWL11
FJ627	1006540	L042	MWL12
FJ628	1006540	L043	MWL13
FJ629	1006540	L044	MWL14
FJ630	1006540	L045	MWL15
FJ631	1006540	L046	MWL16
FJ632	1006543	L017	MPARBS
FK633	1006543	L018	MPGT
FK634	1006542	L021	MWAG
FK635	1006542	L022	MWALPG
FK636	1006542	L050	MWZG
FK637	1006544	R056	[illegible]
FK639	[illegible]		
FK640	1006542	L023	MWBG

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
FK641	1006542	L048	MWQG
FK642	1006551	R055	MWSG
FK643	1006542	L019	MRGG
FK644	1006542		[illegible]
FK645	1006542		[illegible]
FK646	1006542		[illegible]
FK647	1006542	L027	MWG4
FK648	1006542	L028	MWG5
FK649	1006542	L029	MWG6
FK650	1006555	R016	MNISQ
FH651	1006546	R011	MLINC
FH652	1006546	R013	MMINC
FH653	1006546	R017	MOINC
FH654	1006546	R019	MPINC
FH655	1006546	R028	MSHANC
FH656	1006546	R029	MSHINC
FK657	1006554	R030	MSQ13
FK658	1006554	R031	MSQ14
FK659	1006554	R032	MSQ15
FK660	1006554	R033	MSQ16
FK661	1006554	R034	MST1
FK662	1006554	R035	MST2
FK663	1006554	R008	MIIP
FK664	1006554	R004	MBR2
FK665	1006545	R003	MBR1
FK666	1006545	R052	$\overline{\text{MTCSA}}$
FH667	1006550	R025	MRPTR
FK668	1006554		[illegible]
FK669	1006544	R054	MWBKG
FH670	1006546	R006	MCTROR
FJ672	1006559	R018	$\overline{\text{MPAL}}$
FK673	1006552	R037	$\overline{\text{MSTPIT}}$
FK675	1006542	L047	MWLPG
FK676	1006552	R007	MGOJAM
FK677	1006554	R009	MINHL
FT678	1006547	R001	M25CPS
FH679	1006546	R010	MINKL
WD680	NA	L062	+13V B
WD681	NA	L061	+3V A
FJ710	1006559	R024	MRPTAL -NU
FJ711	1006559	R051	MTCAL -NU
FJ712	1006559	R005	MCTRAL -NU
FJ715	1006544	R057	$\overline{\text{MBAL}}$ -NU
FC716	1006552	R058	MD2
AK717	1006559	R059	ALGA
WD683	NA	L065	GRND
WD683	NA	L066	GRND
WD683	NA	L067	GRND
WD683	NA	L068	GRND
WD683	NA	R065	GRND
WD683	NA	R066	GRND
WD683	NA	R067	GRND
WD683	NA	R068	GRND

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	PIN ASSIGNMENTS	SIGNAL NAME
BJ684	1006540	L001	MDT01
BJ685	1006540	L002	MDT02
BJ686	1006540	L003	MDT03
BJ687	1006540	L004	MDT04
BJ688	1006540	L005	MDT05
BJ689	1006540	L006	MDT06
BJ690	1006540	L007	MDT07
BJ691	1006540	L008	MDT08
BJ692	1006540	L009	MDT09
BJ693	1006540	L010	MDT10
BJ694	1006540	L011	MDT11
BJ695	1006540	L012	MDT12
BJ696	1006540	L013	MDT13
BJ697	1006540	L014	MDT14
BJ698	1006540	L015	MDT15
BJ699	1006540	L016	MDT16
BK700	1006546	R012	MLOAD
BK701	1006546	R023	MREAD
BK702	1006552	R027	MSBSTP
BK703	1006552	R036	MSTP
BK704	1006552	R038	MSTRT
BK705	1006554	R053	MTCSAI
BK706	1006554	R015	MNHRPT
BK707	1006546	R014	MNHNC
BK718	1006547	R063	MNHSBF-NU
BK719	1006553	R064	$\overline{\text{MONPAR}}$-NU

CIRCUIT TYPE

- W WIRE INPUT/OUTPUT
- F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
- B BASE OF MICROLOGIC NASA DWG 1006013
- A COLLECTOR OF NOR GATE NASA DWG 1006013

SIGNAL TYPE

- C FIXED FREQUENCY
- H INCREMENT
- J DATA
- K CONTROL
- T TIMING
- D DC LEVEL

NOTES:

1. NU NOT USED BY CTS

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± DECIMALS ± ANGLES ± DO NOT SCALE THIS DRAWING	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS DWG. NO. CONTRACT	MANNED SPACECRAFT CENTER HOUSTON, TEXAS
APPLICATION		MATERIAL	DRAWN DATE CHECKED APPROVAL APPROVAL	AGC TEST CONNECTOR
		HEAT TREATMENT	NASA APPROVAL 7/1/63	CODE IDENT NO. — SIZE D NASA DRAWING NO. 1006081
		FINAL FINISH	MIT APPROVAL	SCALE WT SHEET OF

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REVISIONS TDRR 01811			
SYM	DESCRIPTION	DATE	APPROVAL

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
FC601	1006552	MQ1
FC602	1006552	$\overline{\text{MQ2}}$
FC603	1006552	MB2
FT604	1006549	MT01
FT605	1006549	MT02
FT606	1006549	MT03
FT607	1006549	MT04
FT608	1006549	MT05
FT609	1006549	MT06
FT610	1006549	MT07
FT611	1006549	MT08
FT612	1006549	MT09
FT613	1006549	MT10
FT614	1006549	MT11
FT615	1006549	MT12
FJ616	1006540	MWL01
FJ617	1006540	MWL02
FJ618	1006540	MWL03
FT619	1006540	MWL04
FJ620	1006540	MWL05
FJ621	1006540	MWL06
FJ622	1006540	MWL07
FJ623	1006540	MWL08
FJ624	1006540	MWL09
FJ625	1006540	MWL10
FJ626	1006540	MWL11
FJ627	1006540	MWL12
FJ628	1006540	MWL13
FJ629	1006540	MWL14
FJ630	1006540	MWL15
FJ631	1006540	MWL16
FJ632	1006543	MPARBS
FK633	1006543	MPGT
FK634	1006542	MWAG
FK635	1006542	$\overline{\text{MWALPG}}$
FK636	1006542	MWZG
FK637	1006544	$\overline{\text{MWXG}}$
FK638	1006542	MWYG
FK639	1006542	$\overline{\text{MRUG}}$
FK640	1006542	$\overline{\text{MWBG}}$

AGC OUTPUTS TO CTS

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
FK641	1006542	MWQG
FK642	1006551	$\overline{\text{MWSG}}$
FK643	1006542	MRGG
FK644	1006542	$\overline{\text{MWG1}}$
FK645	1006542	$\overline{\text{MWG2}}$
FK646	1006542	$\overline{\text{MWG3}}$
FK647	1006542	$\overline{\text{MWG4}}$
FK648	1006542	MWG5
FK649	1006542	$\overline{\text{MWG6}}$
FK650	1006555	MNISQ
FH651	1006546	MLINC
FH652	1006546	MMINC
FH653	1006546	MOINC
FH654	1006546	MPINC
FH655	1006546	MSHANC
FH656	1006546	MSHINC
FK657	1006554	MSQ13
FK658	1006554	MSQ14
FK659	1006554	MSQ15
FK660	1006554	MSQ16
FK661	1006546	MST1
FK662	1006546	MST2
FK663	1006546	MIIP
FK664	1006554	MBR2
FK665	1006545	MBR1
FK666	1006545	$\overline{\text{MTCSA}}$
FH667	1006550	MRPTR
FK668	1006556	$\overline{\text{MRRPA}}$
FK669	1006544	$\overline{\text{MWBKG}}$
FH670	1006546	MCTROR
FK671	1006546	MRCA
FJ672	1006558	$\overline{\text{MPAL}}$
FK673	1006552	$\overline{\text{MSTPIT}}$
FK675	1006542	MWLPG
FK676	1006552	MGOJAM
FK677	1006554	$\overline{\text{MINHL}}$
FT678	1006547	M25CPS
FH679	1006546	MINKL
WD680	NA	+15V
WD681	NA	+3V
WD683	NA	GRND

CTS INPUTS TO AGC

SIGNAL NUMBER	AGC MODULE NASA DWG.	SIGNAL NAME
BJ684	1006540	MDT01
BJ685	1006540	MDT02
BJ686	1006540	MDT03
BJ687	1006540	MDT04
BJ688	1006540	MDT05
BJ689	1006540	MDT06
BJ690	1006540	MDT07
BJ691	1006540	MDT08
BJ692	1006540	MDT09
BJ693	1006540	MDT10
BJ694	1006540	MDT11
BJ695	1006540	MDT12
BJ696	1006540	MDT13
BJ697	1006540	MDT14
BJ698	1006540	MDT15
BJ699	1006540	MDT16
BK700	1006546	MLOAD
BK701	1006546	MREAD
BK702	1006552	MSBSTP
BK703	1006552	MSTP
BK704	1006552	MSTRT
BK705	1006554	MTCSAI
BK706	1006554	MNHRPT
BK707	1006546	MNHNC
BK708	1006098	CNTRL1
BK709	1006098	CNTRL2

CIRCUIT TYPE

- W WIRE INPUT/OUTPUT
- F COLLECTOR OF FAN-IN GATE NASA DWG 1006013
- B BASE OF MICROLOGIC NASA DWG 1006013

SIGNAL TYPE

- C FIXED FREQUENCY
- H INCREMENT
- J DATA
- K CONTROL
- T TIMING
- D DC LEVEL

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
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CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN ________ DATE ____
CHECKED ________
APPROVAL ________
APPROVAL ________
NASA APPROVAL 7/2/63
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC TEST CONNECTOR

CODE IDENT NO
SIZE D
NASA DRAWING NO. 1006081
SCALE
WT
SHEET OF

1006081

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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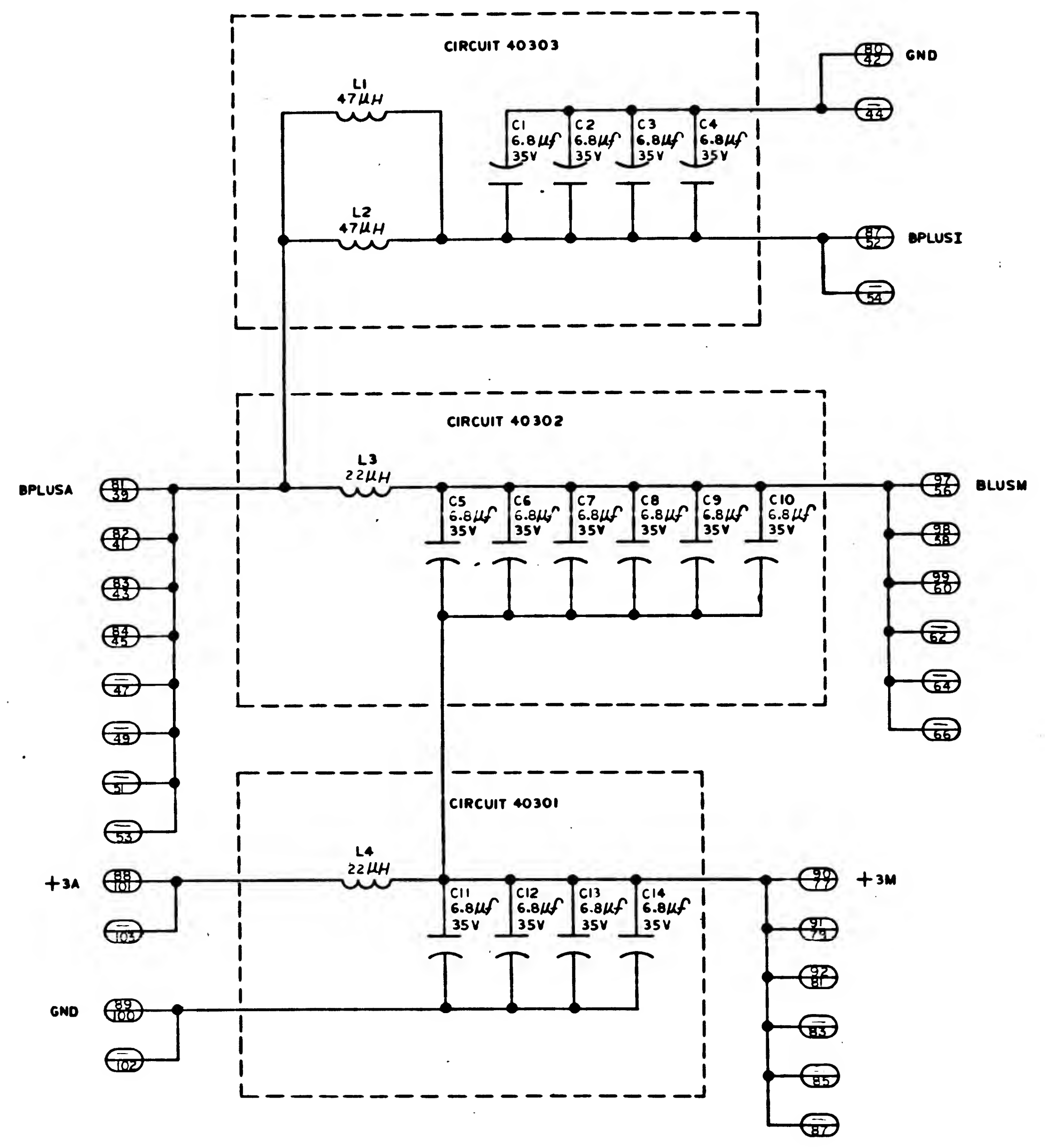
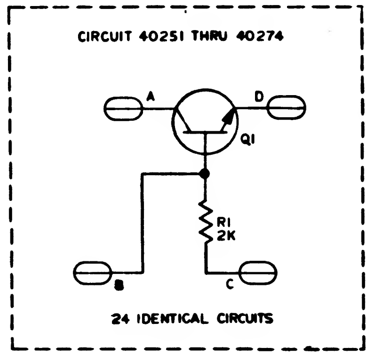
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR01295	5-16-63	





REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8μf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8μf		35V
L1	1010406-14	INDUCTORS	47μH		
L2	1010406-14		47μH		
L3	1006812		22μH		
L4	1006812	INDUCTORS	22μH		
Q1	1006752	TRANSISTOR			

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 **DATE** 3-27-63

CIRCUIT NO	A			B			C			D		
	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
40251	40251 A	23	10	XB0E	25	28	B PLUS M	13	INT	+3 M	26	INT
40252	40252 A	15	11	XB1E	17	29		13				
40253	40253 A	24	12	XB2E	28	30		12				
40254	40254 A	16	13	XB3E	18	31		12				
40255	40255 A	20	14	XB4E	22	32		12				
40256	40256 A	10	15	XB5E	14	33		12				
40257	40257 A	19	16	XB6E	21	34		13				
40258	40258 A	09	17	XB7E	11	35		13				
40259	40259 A	06	18	XT0E	08	36		12				
40260	40260 A	02	19	XT1E	04	37		12				
40261	40261 A	01	20	XT2E	03	38		13				
40262	40262 A	05	21	XT3E	07	39		13			26	
40263	40263 A	133	50	YB0E	129	68		131			117	
40264	40264 A	124	51	YB1E	122	69		130				
40265	40265 A	134	52	YB2E	132	70		130				
40266	40266 A	123	53	YB3E	121	71		131				
40267	40267 A	128	54	YB4E	126	72		130				
40268	40268 A	120	55	YB5E	118	73		130				
40269	40269 A	127	56	YB6E	125	74		131				
40270	40270 A	119	57	YB7E	115	75		131				
40271	40271 A	138	58	YT0E	136	76		130				
40272	40272 A	142	59	YT1E	140	77		130				
40273	40273 A	141	60	YT2E	139	78		131				
40274	40274 A	137	61	YT3E	135	79		131			117	

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D-70327

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

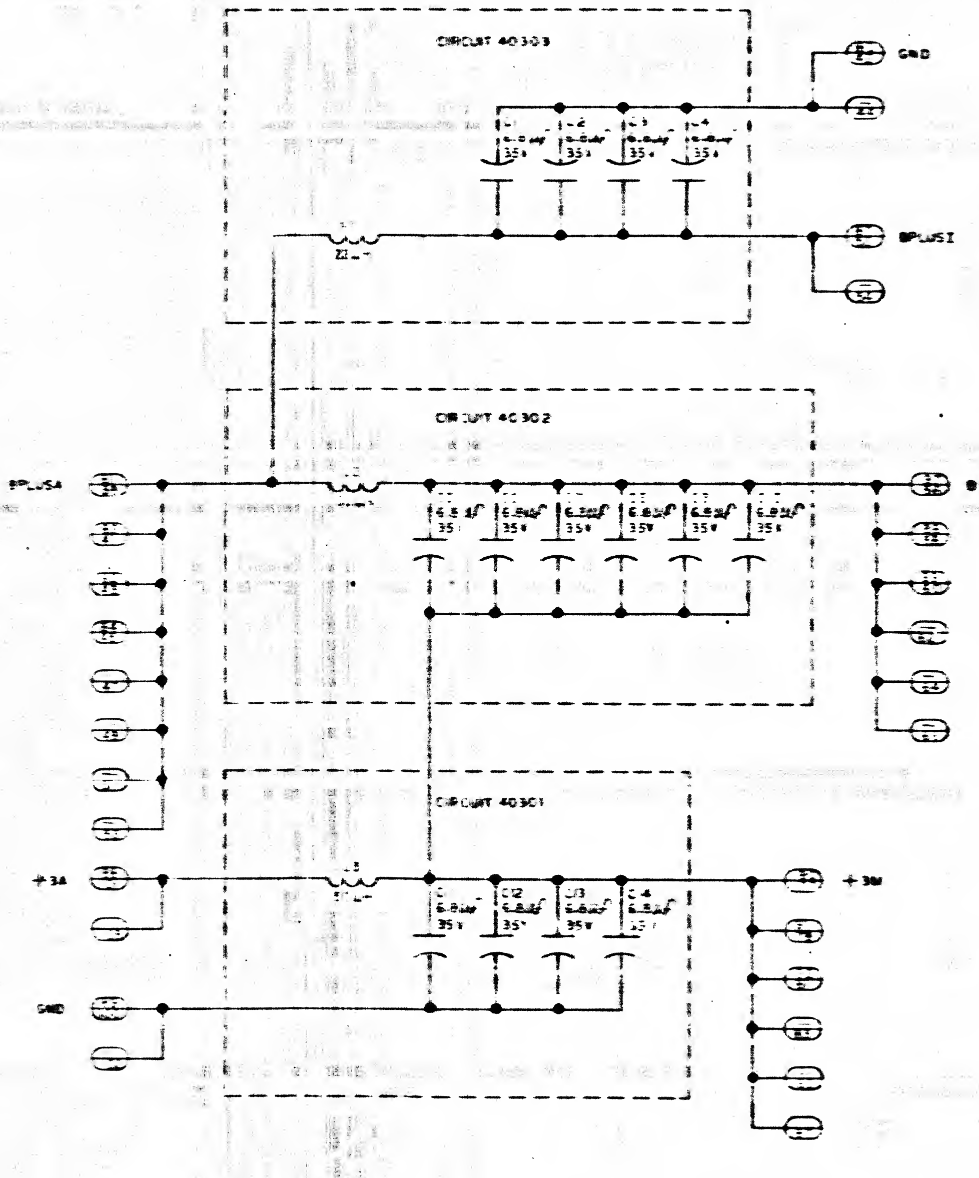
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN L. T. DATE 3-14-63
CHECKED
APPROVAL Albert Hopkins
APPROVAL 3/27/63
NASA APPROVAL W. J. Rhine 3-27-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DRIVER SERVICE STICK

CODE IDENT NO | SIZE E | NASA DRAWING NO 1006082
SCALE — | WT | SHEET 1 OF 1



REF DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8µF		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8µF		35V
L1	1010436-12	INDUCTORS	22µH		
L2	[illegible]		[illegible] µH		
L3	10067[illegible]		[illegible] µH		
Q1	1006752	TRANSISTOR			
R2	1006750-15	RESISTOR	200		1/4W
R3	-39		2K		
R4	-39				
R5	-39				
R6	-39				
R7	-39				
CR1		DIODE			
CR2		DIODE			

FOR INFORMATION ONLY

CLASS II RELEASE TDR No. [illegible] DATE

CIRCUIT NO	A			B			C			D		
	SIGNAL NAME	ACC 5	ACC 4	SIGNAL NAME	ACC 5	ACC 4	SIGNAL NAME	ACC 5	ACC 4	SIGNAL NAME	ACC 5	ACC 4
40251	40251A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	B PLUS M	3	[illegible]	[illegible]	[illegible]	[illegible]
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40253	40253A	[illegible]	2	[illegible]	18	[illegible]		2				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3	[illegible]		4				
40255	40255A	20	4	[illegible]	12	32		2				
40256	40256A	[illegible]	5	[illegible]	4	33		2				
40257	40257A	9	6	[illegible]	[illegible]	34		3				
40258	40258A	19	7	[illegible]		35		3				
40259	40259A	36	8	[illegible]	18	36		2				
40260	40260A	12	9	[illegible]	14	37		1				
40261	40261A	[illegible]	20	[illegible]	13	38		3				
40262	40262A	[illegible]	2	[illegible]	[illegible]	[illegible]		3			26	
40263	40263A	33	50	[illegible]	19	68		3	[illegible]			
40264	40264A	24	5	[illegible]	22	69		1				
40265	40265A	34	52	[illegible]	32	70		3				
40266	40266A	23	[illegible]	[illegible]	21			3				
40267	40267A	28	54	[illegible]	26	72		3				
40268	40268A	[illegible]	[illegible]	[illegible]	8	73		3				
40269	40269A	27	56	[illegible]	25	74		3				
40270	40270A	9	57	[illegible]	5	75		1				
40271	40271A	38	58	[illegible]	36	76		3				
40272	40272A	42	[illegible]	[illegible]	[illegible]	77		3				
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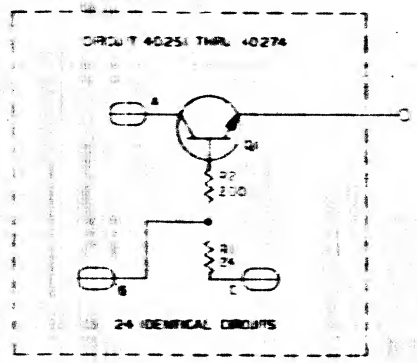

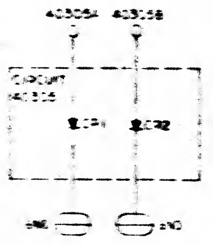

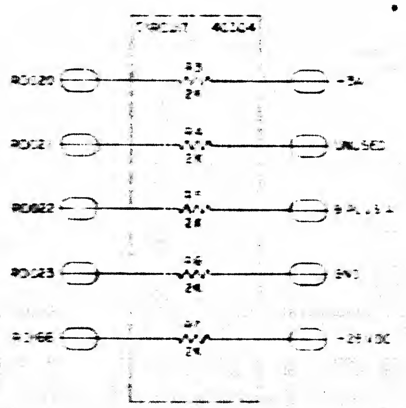

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

INSTRUMENTATION LAB

MANNED SPACECRAFT CENTER
HOUSTON TEXAS

SCHEMATIC
DRIVER SERVICE STICK

E
1006082

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 00671

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01295	5-16-63	
B	REVISED PER TDRR 02052	7/17/63	
C	REVISED PER TDRR 03171	9-16-63	

REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8 µf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8 µf		35V
L1	1006798	INDUCTORS	50 µH		
L2	1006798		50 µH		
L3	1006798		50 µH		
Q1	1006752	TRANSISTOR			
Q2					
Q3					
R2	1006750-15	RESISTOR	200		1/4W
R3	-39		2K		
R4	-39				
R5	-39				
R6	-39				
R7	-39				
R8	-25		510		
R9	-39		2K		
R10	-32		1K		
R11	-32		1K		
R12	-25		510		
R13	-39		2K		
R14	-39		2K		
R15	-39		2K		

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
CR1	1006751	DIODE			
CR2					
CR3					
CR4					
CR5					
CR6					
CR7	1006838				

ASSEMBLY REFERENCE PREFIX	CIRCUIT NO	A			B			C			D		
		SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
12	40251	40251 A	23	10	XB0E	24	28	BPLSMZ	27	INT	40305A	INT	INT
8	40252	40252 A	15	11	XB1E	16	29						
11	40253	40253 A	22	12	XB2E	25	30						
7	40254	40254 A	14	13	XB3E	17	31						
9	40255	40255 A	18	14	XB4E	21	32						
5	40256	40256 A	10	15	XB5E	11	33						
10	40257	40257 A	19	16	XB6E	20	34						
6	40258	40258 A	09	17	XB7E	12	35						
3	40259	40259 A	06	18	XT0E	07	36						
1	40260	40260 A	02	19	XT1E	03	37						
2	40261	40261 A	01	20	XT2E	04	38						
4	40262	40262 A	05	21	XT3E	08	39		27				
20	40263	40263 A	133	50	YB0E	132	68		117		40305B		
15	40264	40264 A	126	51	YB1E	123	69						
19	40265	40265 A	134	52	YB2E	131	70						
16	40266	40266 A	125	53	YB3E	124	71						
17	40267	40267 A	130	54	YB4E	127	72						
13	40268	40268 A	122	55	YB5E	119	73						
18	40269	40269 A	129	56	YB6E	128	74						
14	40270	40270 A	121	57	YB7E	120	75						
21	40271	40271 A	138	58	YT0E	135	76						
23	40272	40272 A	142	59	YT1E	139	77						
24	40273	40273 A	141	60	YT2E	140	78						
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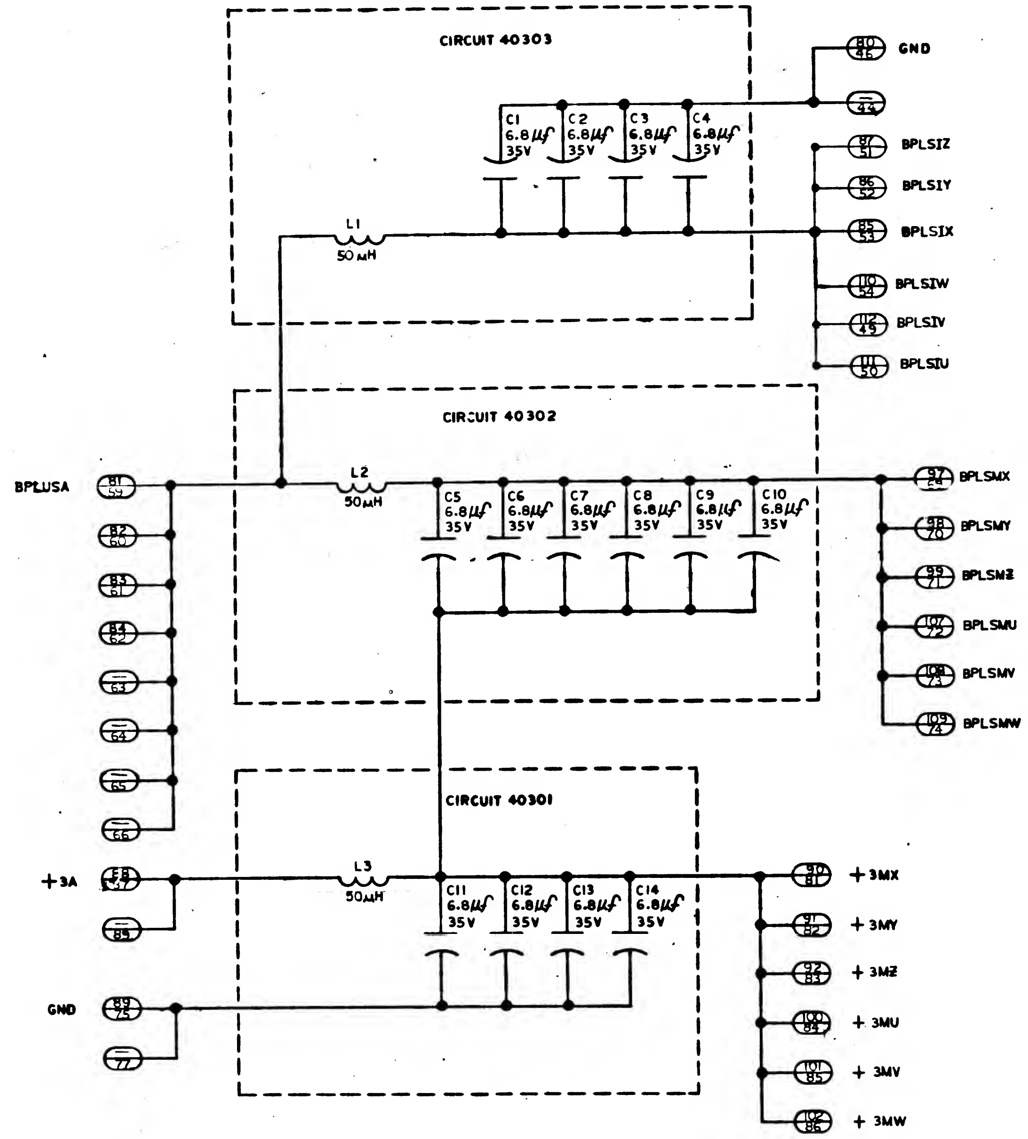
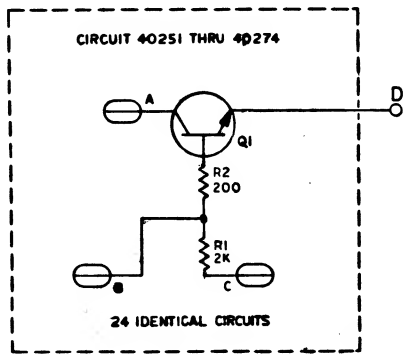
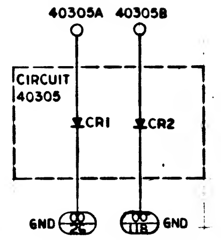
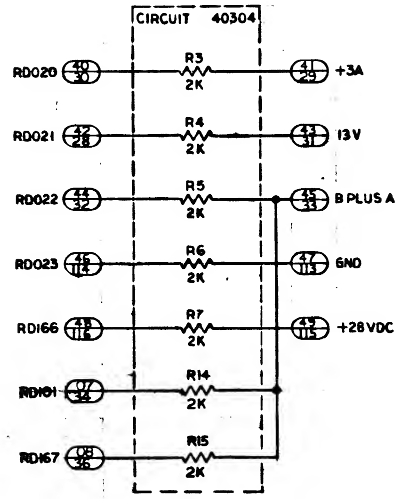
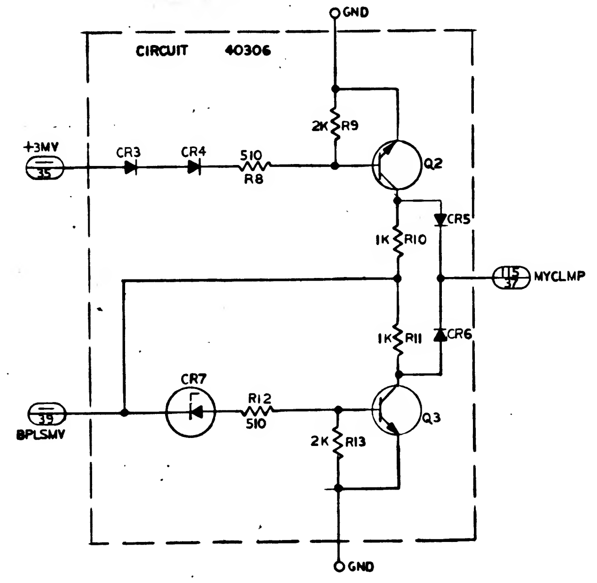










NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 3-11-63
CHECKED
APPROVAL Albert Hopkins
APPROVAL
NASA APPROVAL W.J. Rhine 3-27-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DRIVER SERVICE MODULE B7

CODE IDENT. NO.
SIZE E
NASA DRAWING NO. 1006082
SCALE —
WT
SHEET 1 OF 1

MASTER

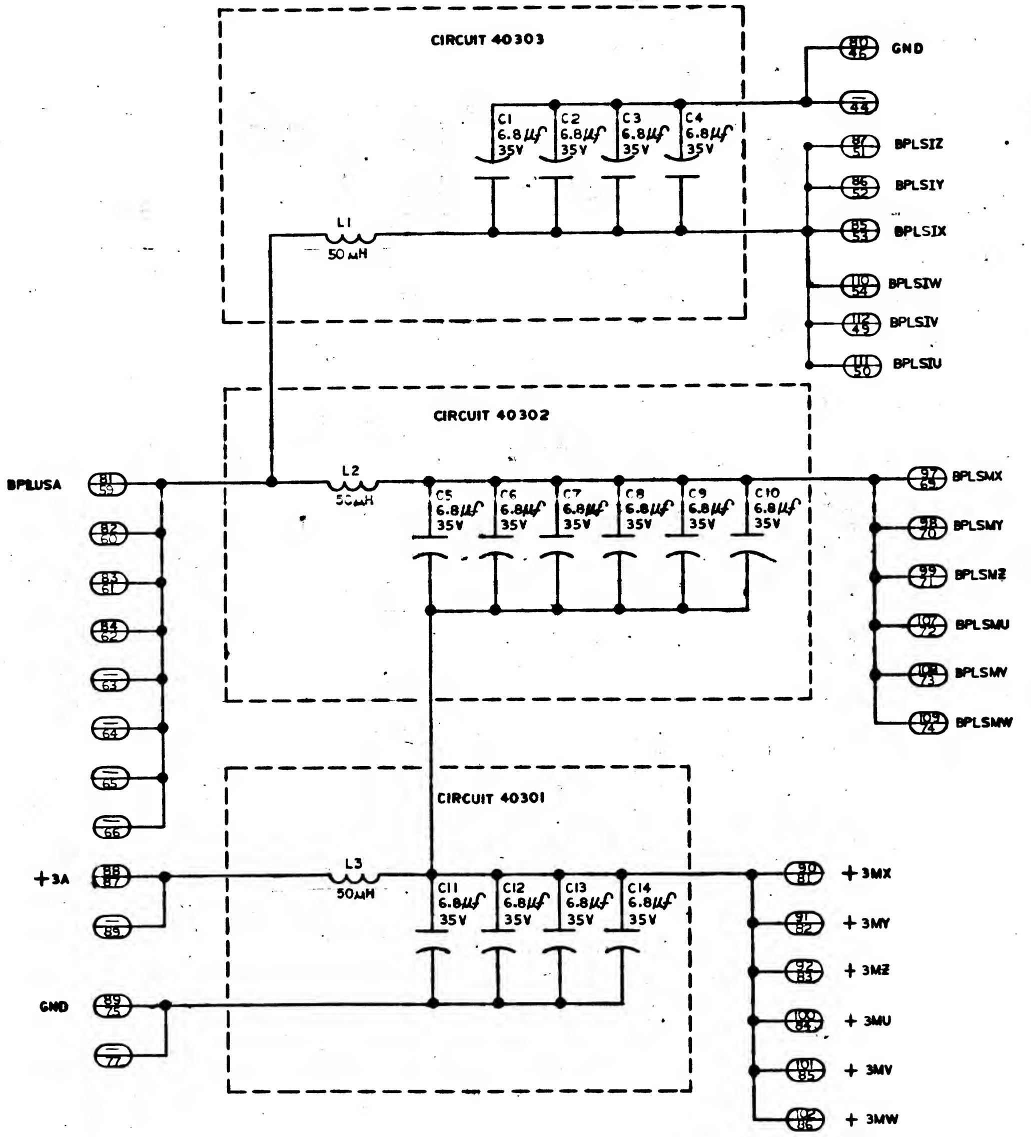
INCHES
PHOTOGRAPHIC SCALE ONLY

1006082 C

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 00671

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01295	5-16-63	
B	REVISED PER TDRR 02052	7/17/63	
C	REVISED PER TDRR 03171	9-16-63	
D	REVISED PER TDRR 05751		



REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8μf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13	↓	↓	↓		↓
C14	1006755-79	CAPACITOR	6.8μf		35V
L1	1006798	INDUCTORS	50μH		
L2	1006798		50μH		
L3	1006798	↓	50μH		
Q1	1006752	TRANSISTOR			
Q2					
Q3	↓	↓			
R2	1006750-15	RESISTOR	200		1/4W
R3	-39		2K		
R4	-39				
R5	-39				
R6	-39				
R7	-39		↓		
R8	-25		510		
R9	-35		2K		
R10	-32		1K		
R11	-32		1K		
R12	-25		510		
R13	-39		2K		
R14	-39		2K		
R15	-39	↓	2K		↓

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
CR1	1006751	DIODE			
CR2					
CR3					
CR4					
CR5					
CR6	↓				
CR7	1006838	↓			

ASSEMBLY REFERENCE PREFIX	CIRCUIT NO	A			B			C			D		
		SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
12	40251	40251 A	23	10	XB0E	24	28	BPLSMZ	27	INT	40305A	INT	INT
8	40252	40252A	15	11	XB1E	16	29						
11	40253	40253A	22	12	XB2E	25	30						
7	40254	40254A	14	13	XB3E	17	31						
9	40255	40255A	18	14	XB4E	21	32						
5	40256	40256A	10	15	XB5E	11	33						
10	40257	40257A	19	16	XB6E	20	34						
6	40258	40258A	09	17	XB7E	12	35						
3	40259	40259A	06	18	XT0E	07	36						
1	40260	40260 A	02	19	XT1E	03	37						
2	40261	40261 A	01	20	XT2E	04	38		↓				
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16	40266	40266 A	125	53	YB3E	124	71						
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18	40269	40269A	129	56	YB6E	128	74						
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21	40271	40271A	138	58	YT0E	135	76						
23	40272	40272A	142	59	YT1E	139	77						
24	40273	40273A	141	60	YT2E	140	78		↓				
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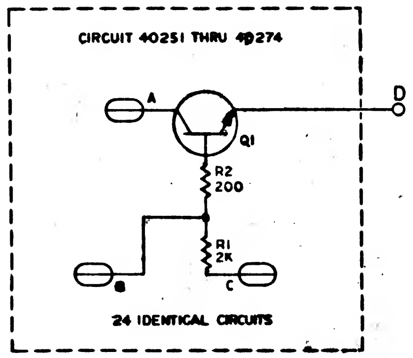

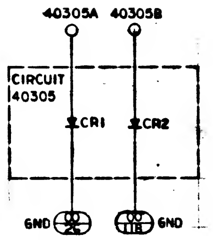

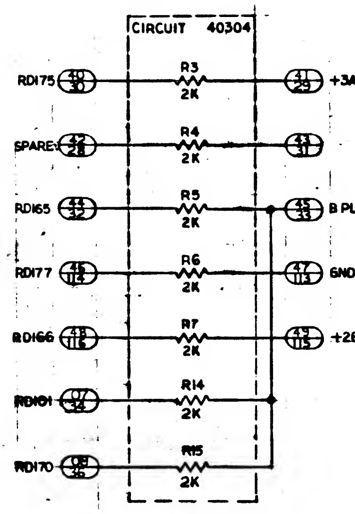

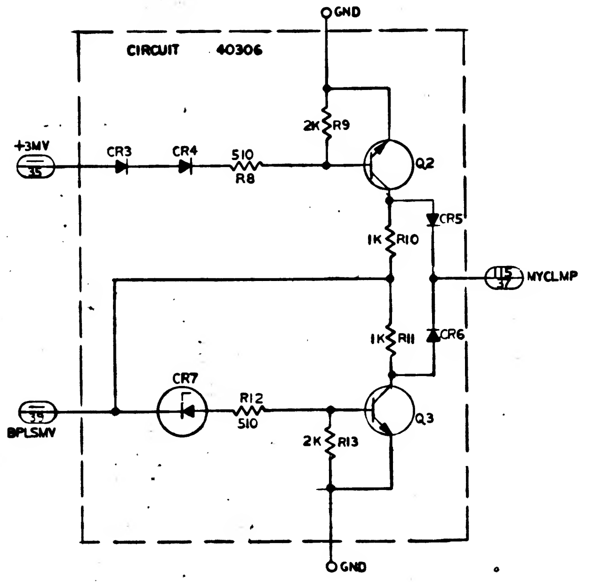

NOTES:

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MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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MATERIAL —
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MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 3-16-63
CHECKED 3/26/63
APPROVAL Albert Hopkins
APPROVAL 3/27/63
NASA APPROVAL W.J. Rhine 3-27-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DRIVER SERVICE MODULE B7

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006082
SCALE —
WT
SHEET 1 OF 1

1006082 D

F-2

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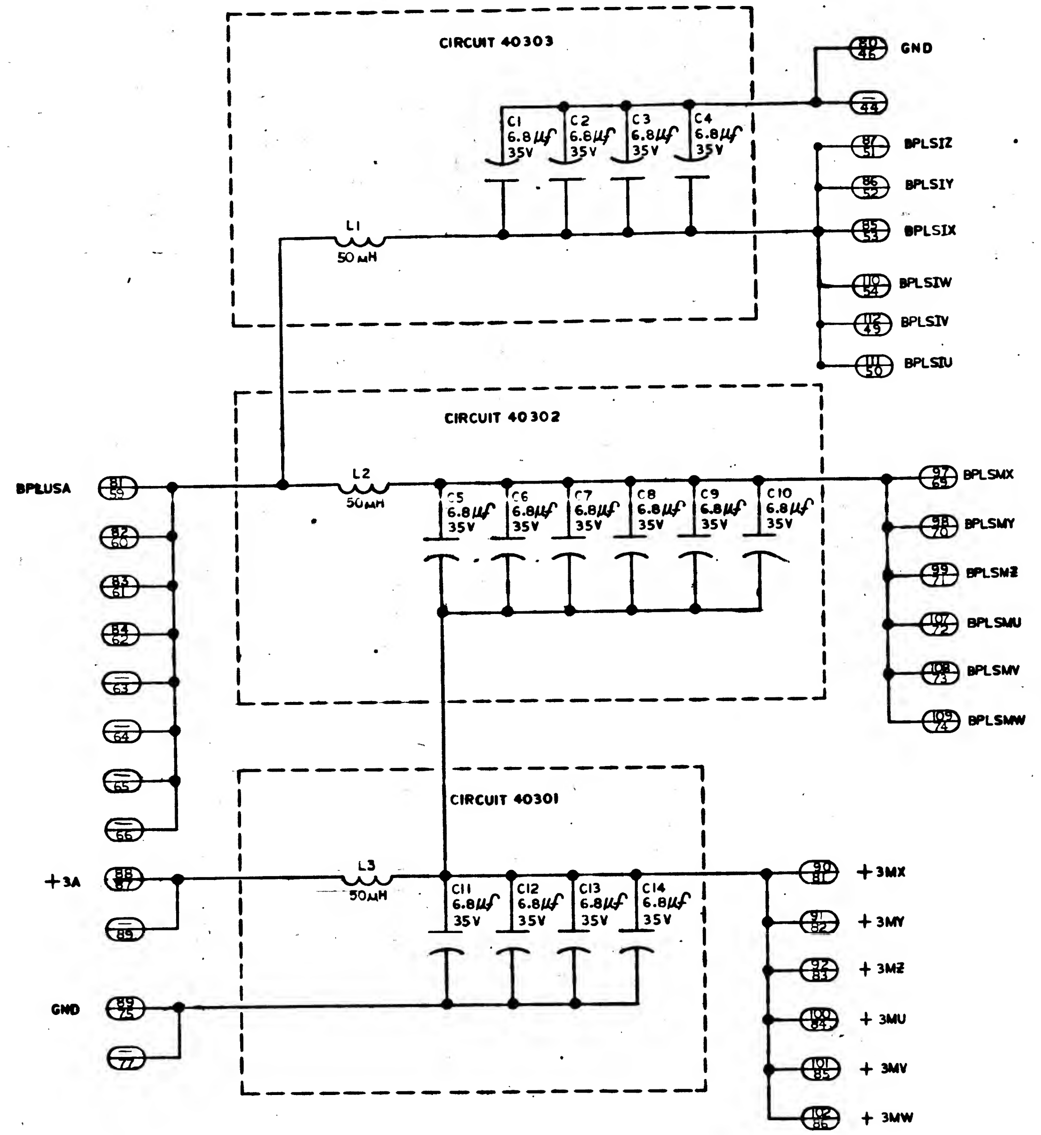
C	REVISED PER TDRR 03171	9-16-63	
D	REVISED PER TDRR 05751		
E	REVISED PER TDRR 06220		



REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8μf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8μf		35V
L1	1006798	INDUCTORS	50μH		
L2	1006798		50μH		
L3	1006798		50μH		
Q1	1006752	TRANSISTOR			
Q2					
Q3					
R2	1006750-15	RESISTOR	200		1/4W
R3	-39		2K		
R4	-39				
R5	-39				
R6	-39				
R7	-39				
R8	-25		510		
R9	-39		2K		
R10	-32		1K		
R11	-32		1K		
R12	-25		510		
R13	-39		2K		
R14	-39		2K		
R15	-39		2K		

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
CR1	1006751	DIODE			
CR2					
CR3					
CR4					
CR5					
CR6					
CR7	1006838				

ASSEMBLY REFERENCE PREFIX	CIRCUIT NO	A			B			C			D		
		SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
12	40251	40251A	23	10	XB0E	24	28	BPLSMZ	27	INT	40305A	INT	INT
8	40252	40252A	15	11	XB1E	16	29						
11	40253	40253A	22	12	XB2E	25	30						
7	40254	40254A	14	13	XB3E	17	31						
9	40255	40255A	18	14	XB4E	21	32						
5	40256	40256A	10	15	XB5E	11	33						
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2	40261	40261A	01	20	XT2E	04	38						
4	40262	40262A	05	21	XT3E	08	39		27				
20	40263	40263A	133	50	YB0E	132	68		117		40305B		
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17	40267	40267A	130	54	YB4E	127	72						
13	40268	40268A	122	55	YB5E	119	73						
18	40269	40269A	129	56	YB6E	128	74						
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21	40271	40271A	138	58	YT0E	135	76						
23	40272	40272A	142	59	YT1E	139	77						
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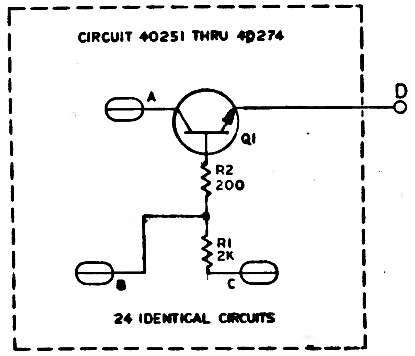
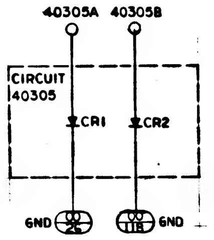
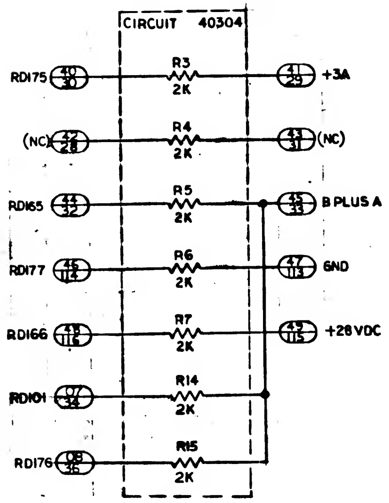
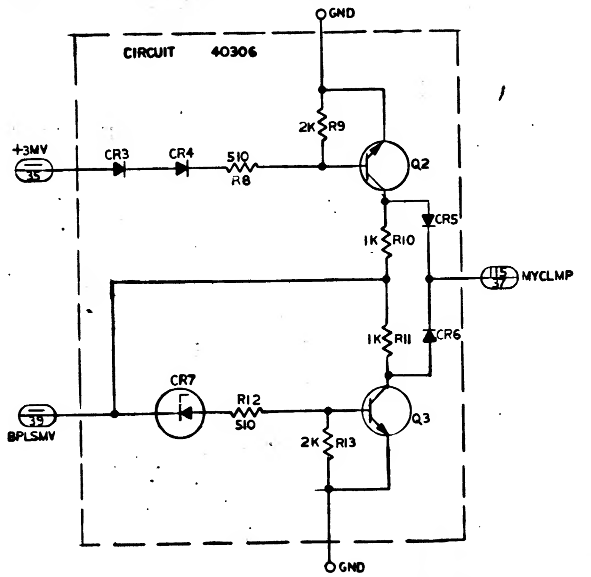








NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN DATE 3-11-63
CHECKED
APPROVAL Albert Hopkins
APPROVAL
NASA APPROVAL 3-27-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DRIVER SERVICE MODULE B7

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006082
SCALE
WT
SHEET 1 OF

MASTER

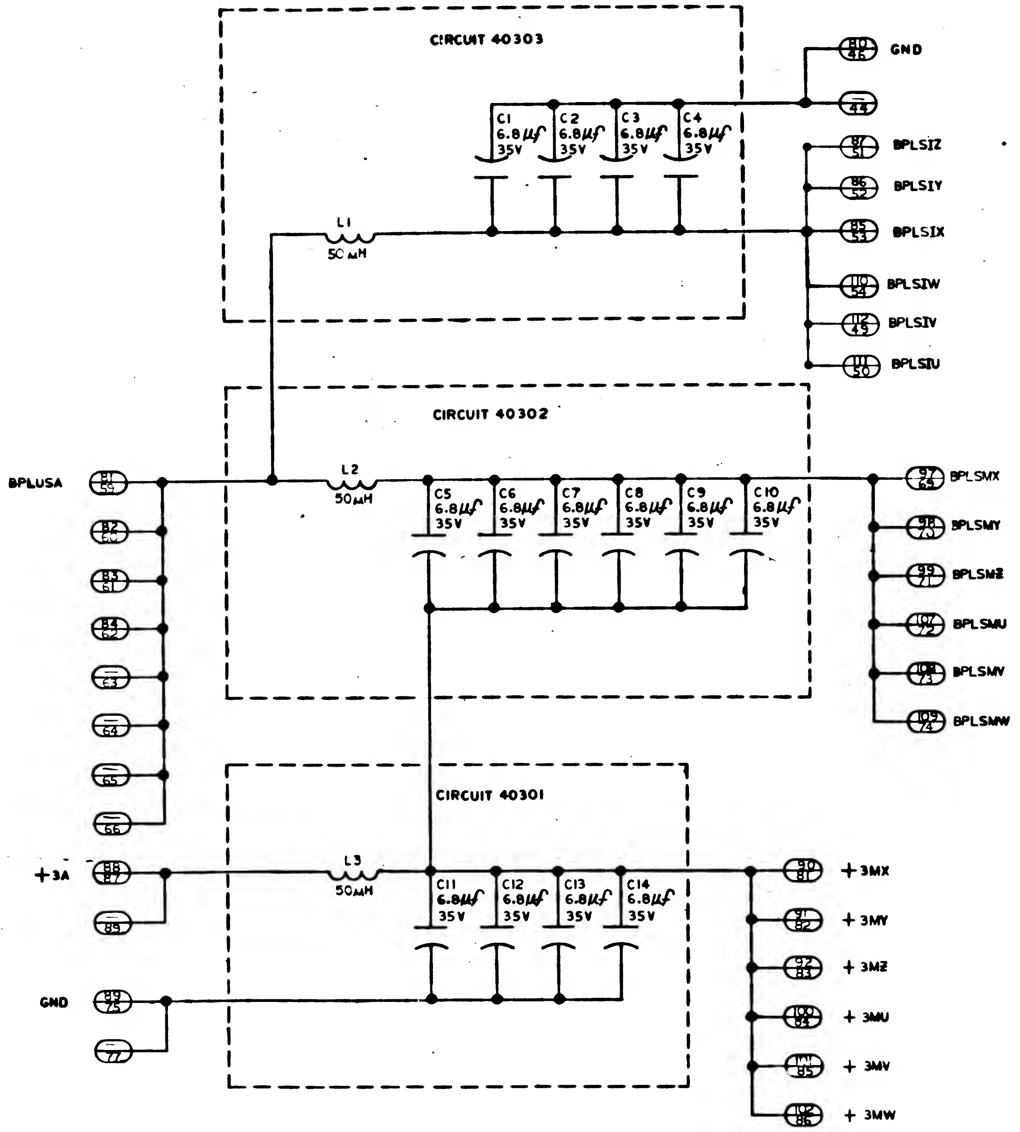
INCHES
PHOTOGRAPHIC SCALE ONLY

1006082 E

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 00697

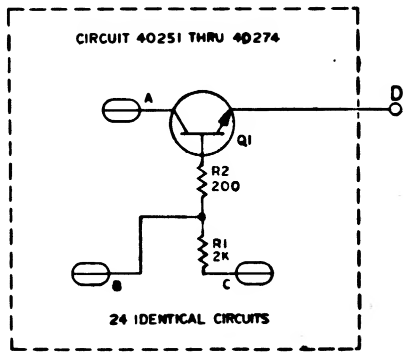
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01295	5-16-63	
B	REVISED PER TDRR 02052	7/17/63	
C	REVISED PER TDRR 03171	9-16-63	
D	REVISED PER TDRR 05751		
E	REVISED PER TDRR 06820		
F	REVISED PER TDRR 07263 DR CHK	3/23/64	

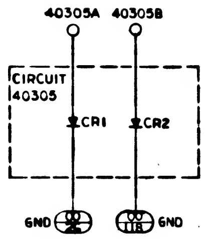


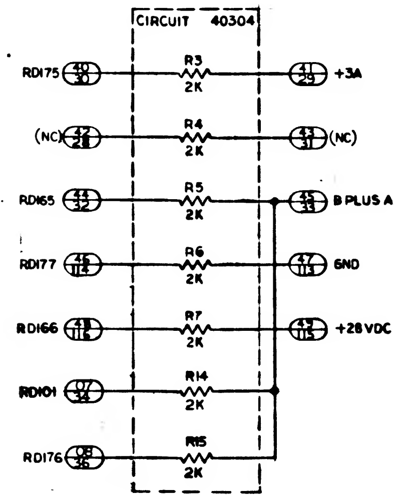
REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8µf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8µf		35V
L1	1006798	INDUCTORS	50µH		
L2	1006798		50µH		
L3	1006798		50µH		
Q1	1006752	TRANSISTOR			
Q2					
~~Q3~~					
R2	1006750-15	RESISTOR	200		1/4W
R3	-39		2K		
R4	-39				
R5	-39				
R6	-39				
R7	-39				
R8	-25		510		
R9	-39		2K		
R10	32		1K		
~~R11~~	~~-32~~		~~1K~~		
~~R12~~	~~-25~~		~~510~~		
~~R13~~	~~-39~~		~~2K~~		
R14	-39		2K		
R15	-39		2K		

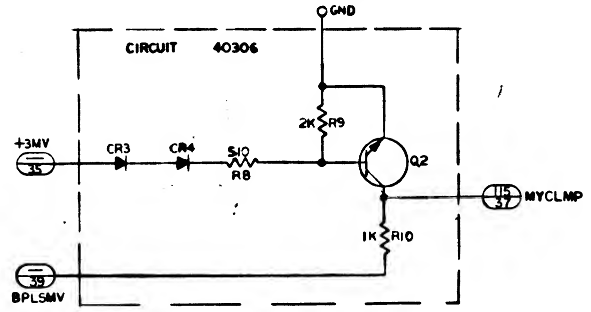
REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
CR1	1006751	DIODE			
CR2					
CR3					
CR4	1006751				
~~CR5~~					
~~CR6~~					
~~CR7~~	~~1006838~~				

ASSEMBLY REFERENCE PREFIX	CIRCUIT NO	A			B			C			D		
		SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
12	40251	40251A	23	10	XB0E	24	28	BPLSMZ	27	INT	40305A	INT	INT
8	40252	40252A	15	11	XB1E	16	29						
11	40253	40253A	22	12	XB2E	25	30						
7	40254	40254A	14	13	XB3E	17	31						
9	40255	40255A	18	14	XB4E	21	32						
5	40256	40256A	10	15	XB5E	11	33						
10	40257	40257A	19	16	XB6E	20	34						
6	40258	40258A	09	17	XB7E	12	35						
3	40259	40259A	06	18	XT0E	07	36						
1	40260	40260A	02	19	XT1E	03	37						
2	40261	40261A	01	20	XT2E	04	38						
4	40262	40262A	05	21	XT3E	08	39		27				
20	40263	40263A	133	50	YB0E	132	68		117		40305B		
15	40264	40264A	126	51	YB1E	123	69						
19	40265	40265A	134	52	YB2E	131	70						
16	40266	40266A	125	53	YB3E	124	71						
17	40267	40267A	130	54	YB4E	127	72						
13	40268	40268A	122	55	YB5E	119	73						
18	40269	40269A	129	56	YB6E	128	74						
14	40270	40270A	121	57	YB7E	120	75						
21	40271	40271A	138	58	YT0E	135	76						
23	40272	40272A	142	59	YT1E	139	77						
24	40273	40273A	141	60	YT2E	140	78						
22	40274	40274A	137	61	YT3E	136	79		117				









NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D-70327

REF: DRIVER SERVICE ASSY 1003165

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 3-
CHECKED
APPROVAL Albert Hopkins
APPROVAL
NASA APPROVAL W.G. 3-27-63
MIT APPROVAL

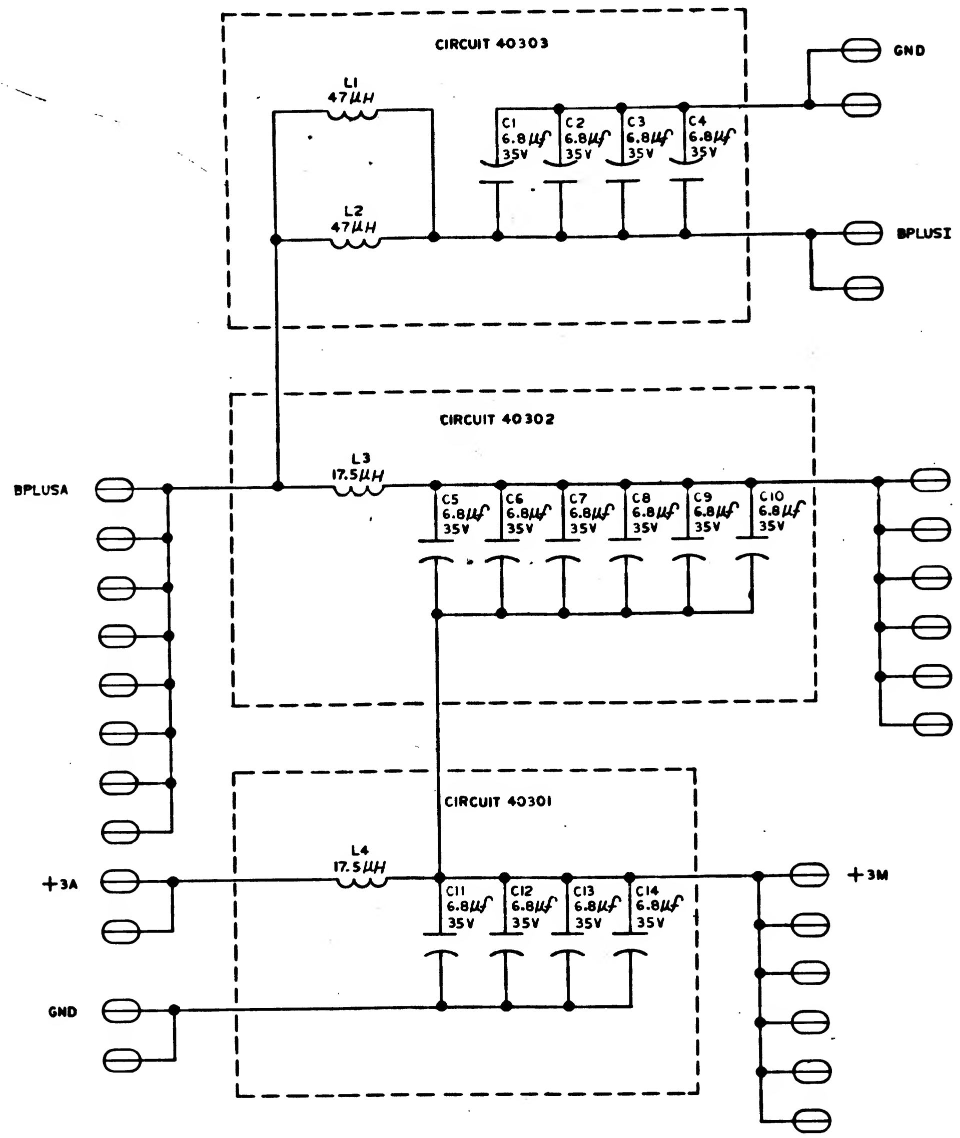
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

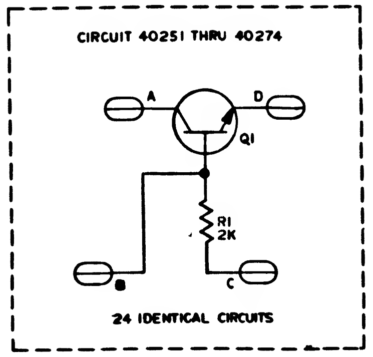
SCHEMATIC
DRIVER SERVICE MODULE B7

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006082
SCALE — | WT | SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL





REF. DES.	PART NO.	DESCRIPTION	VALUE	TOL.	RATING
R1	1006750-39	RESISTOR	2K		1/4W
C1	1006755-79	CAPACITOR	6.8µf		35V
C2					
C3					
C4					
C5					
C6					
C7					
C8					
C9					
C10					
C11					
C12					
C13					
C14	1006755-79	CAPACITOR	6.8µf		35V
L1	1006756-9	INDUCTORS	47µH		
L2	1006756-9		47µH		
L3	1006812		17.5µH		
L4	1006812	INDUCTORS	17.5µH		
Q1	1006752	TRANSISTOR			

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 DATE 3-27-63

CIRCUIT NO	A			B			C			D		
	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4	SIGNAL NAME	AGC 5	AGC 4
40251	40251 A			XB0E			B PLUS M			+3 M		
40252	40252 A			XB1E								
40253	40253 A			XB2E								
40254	40254 A			XB3E								
40255	40255 A			XB4E								
40256	40256 A			XB5E								
40257	40257 A			XB6E								
40258	40258 A			XB7E								
40259	40259 A			XT0E								
40260	40260 A			XT1E								
40261	40261 A			XT2E								
40262	40262 A			XT3E								
40263	40263 A			YB0E								
40264	40264 A			YB1E								
40265	40265 A			YB2E								
40266	40266 A			YB3E								
40267	40267 A			YB4E								
40268	40268 A			YB5E								
40269	40269 A			YB6E								
40270	40270 A			YB7E								
40271	40271 A			YT0E								
40272	40272 A			YT1E								
40273	40273 A			YT2E								
40274	40274 A			YT3E								

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 3-14-63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL 3/27/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
DRIVER SERVICE STICK

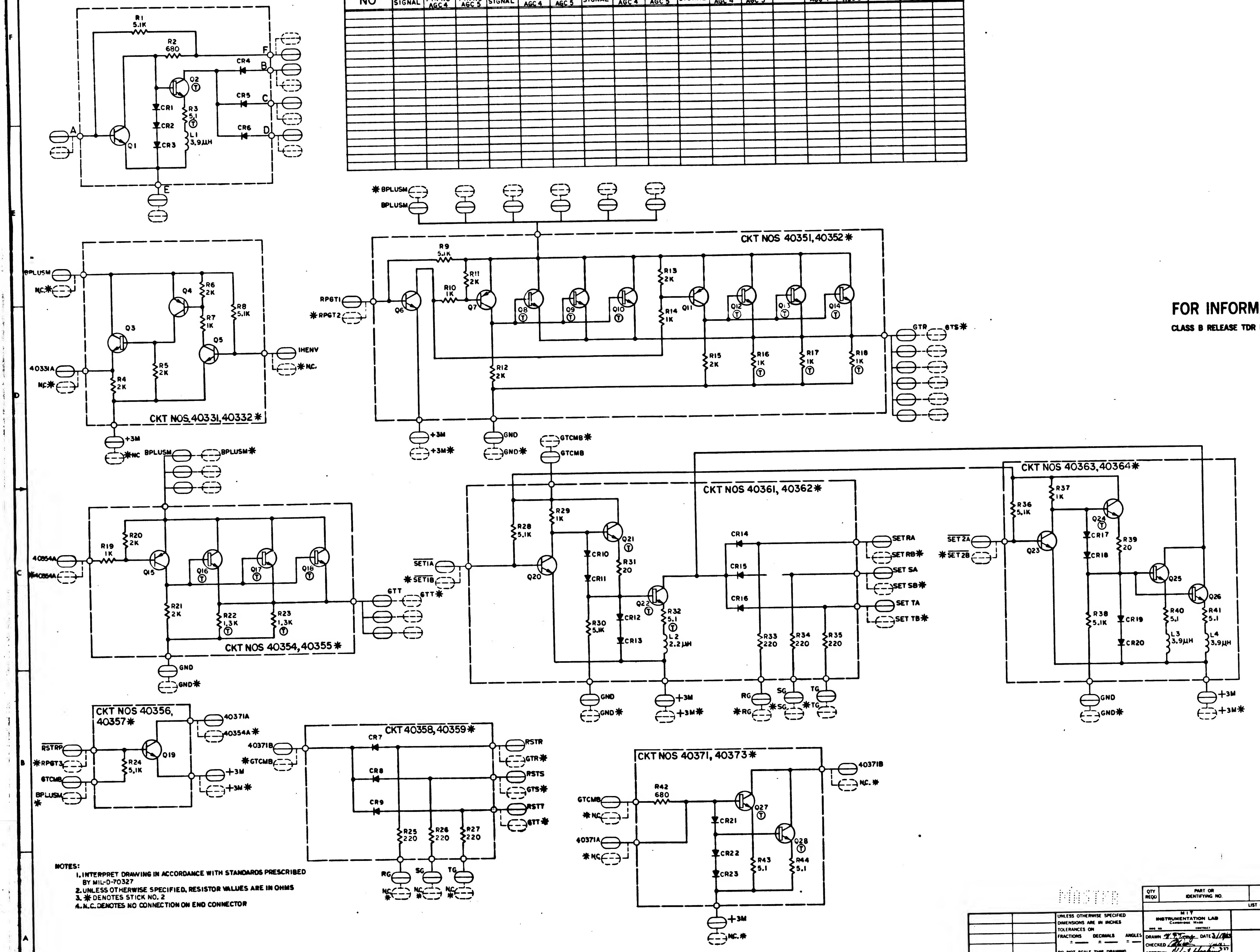
CODE IDENT NO. SIZE E NASA DRAWING NO 1006082
SCALE — WT SHEET 1 OF 1

1006082

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL

CIRCUIT NO	A			B			C			D			E			F		
	SIGNAL	PIN NO AGC 4	PIN NO AGC 5	SIGNAL	PIN NO AGC 4	PIN NO AGC 5	SIGNAL	PIN NO AGC 4	PIN NO AGC 5	SIGNAL	PIN NO AGC 4	PIN NO AGC 5	SIGNAL	PIN NO AGC 4	PIN NO AGC 5	SIGNAL	PIN NO AGC 4	PIN NO AGC 5



FOR INFORMATION

CLASS B RELEASE TDR No. 00671 DATE 3-27-63

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. * DENOTES STICK NO. 2
4. N.C. DENOTES NO CONNECTION ON END CONNECTOR

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DRAWN W. F. Tracy DATE 3/1/63
CHECKED
APPROVAL Albert Hopkins 3-27
APPROVAL Eldon C. Hall 3/22/63
NASA APPROVAL W. J. 8-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE DRIVER STICK

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006084
SCALE — WT — SHEET 1 OF 2

1006084

SYM	REVISIONS DESCRIPTION	DATE	APPROVAL

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750-49	RESISTOR	5.1K		1/4 W	
R2	1006750-28		680			
R3	1006788-2		5.1			
R4	1006750-39		2K			40331 AND 40332*
R5	-39		2K			
R6	-39		2K			
R7	-32		1K			
R8	-49		5.1K			
R9	-49		5.1K			40351 AND 40352*
R10	-32		1K			
R11	-39		2K			
R12	-39		2K			
R13	-39		2K			
R14	-32		1K			
R15	-39		2K			
R16	-32		1K			
R17	-32		1K			
R18	-32		1K			
R19	-32		1K			40354 AND 40355*
R20	-39		2K			
R21	-39		2K			
R22	-35		1.3K			
R23	-35		1.3K			
R24	-49		5.1K			40356 AND 40357*
R25	-16		220			40358 AND 40359*
R26	-16		220			
R27	-16		220			
R28	-49		5.1K			40361 AND 40362*
R29	-32		1K			
R30	-49		5.1K			
R31	1010369-148		20			
R32	1006788-2		5.1			
R33	1006750-16		220			
R34	-16		220			
R35	-16		220			
R36	-49		5.1K			40363 AND 40364*
R37	-32		1K			
R38	-49		5.1K			
R39	1010369-148		20			
R40	1006788-2		5.1			
R41	1006788-2		5.1			
R42	1006750-28		680			40371 AND 40373*
R43	1006788-2		5.1			
R44	1006788-2		5.1			
L1	1006756-6	INDUCTOR	3.9 μH			
L2	-5		2.2 μH			40361 AND 40362*
L3	-6		3.9 μH			40363 AND 40364*
L4	-6		3.9 μH			40363 AND 40364*

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING	CKT NO USED ON
CR1	1006751	DIODE				
CR2						
CR3						
CR4						
CR5						
CR6						
CR7						40358 AND 40359*
CR8						
CR9						
CR10						40361 AND 40362*
CR11						
CR12						
CR13						
CR14						
CR15						
CR16						
CR17						40363 AND 40364*
CR18						
CR19						
CR20						
CR21						40371 AND 40373*
CR22						
CR23						
Q1	1006752	TRANSISTOR				
Q2	1006759					
Q3	1006759					40331 AND 40332*
Q4	1006753					
Q5	1006752					
Q6	1006752					40351 AND 40352*
Q7	1006753					
Q8	1006759					
Q9						
Q10						
Q11	1006753					
Q12	1006759					
Q13						
Q14						
Q15	1006753					40354 AND 40355*
Q16	1006759					
Q17						
Q18						
Q19	1006752					40356 AND 40357*
Q20						40361 AND 40362*
Q21						
Q22	1006759					
Q23	1006752					40363 AND 40364*
Q24	1006752					
Q25	1006759					
Q26						
Q27						40371 AND 40373*
Q28						40371 AND 40373*

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 DATE 3-29-63

1006084

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

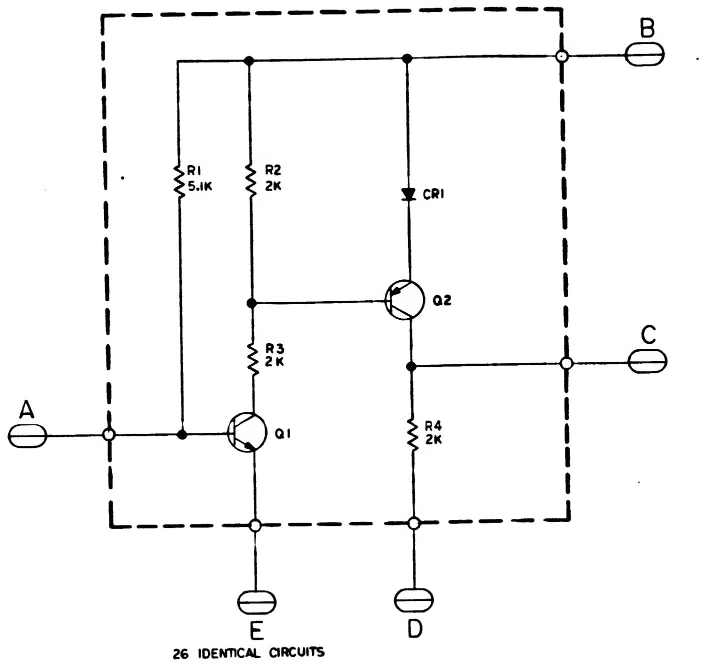
MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN W. F. Tory DATE 3/19/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL Eldon C. Hall 3/28/63
NASA APPROVAL W. J. Rhine 3-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

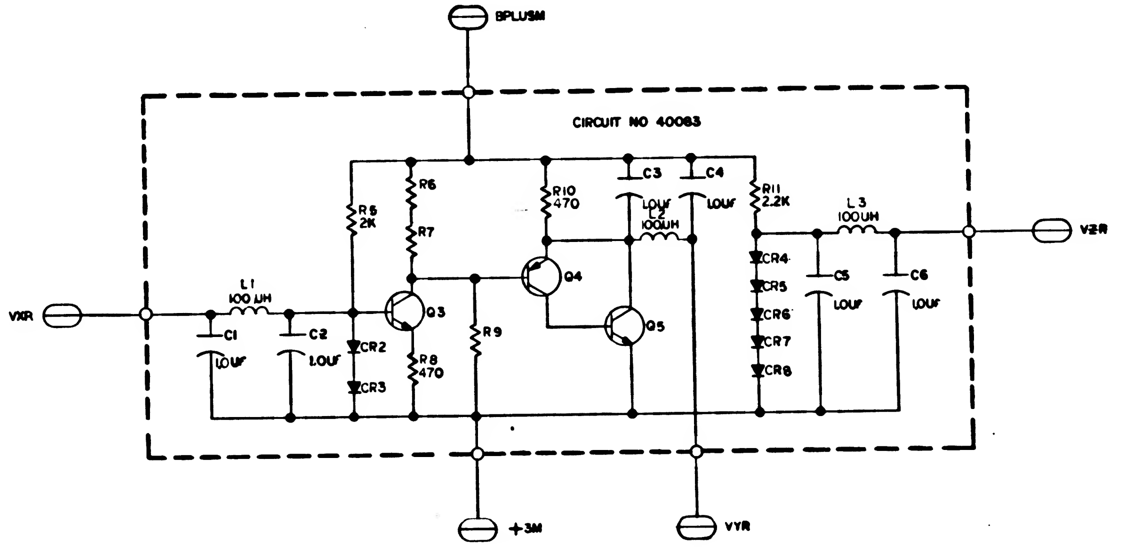
SCHEMATIC
ROPE DRIVER STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006084
SCALE — WT — SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO



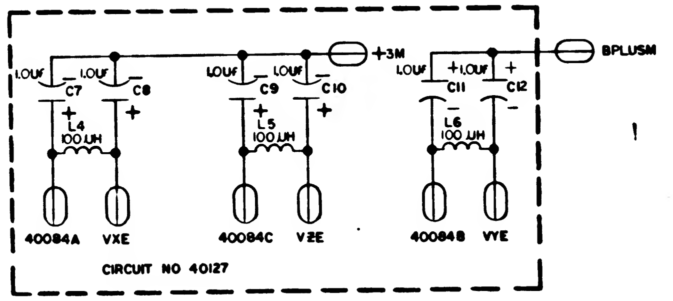
26 IDENTICAL CIRCUITS
CKTS 40085
THRU 40110



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 DATE 3-27-63

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING	CKT. NO. USED ON
R1	1006750-49	RESISTOR	5.1K		1/4W	40085 THRU 40110
R2	1006750-39		2K			
R3	1006750-39		2K			
R4	1006750-39		2K			
R5	1006750-39		2K			40083
R6						
R7						
R8	1006750-24		470			
R9						
R10	1006750-24		470			
R11	1006750-40		2.2K			
C1	1006755 69	CAPACITORS	1.0 UF		35V	40083
C2						
C3						
C4						
C5						
C6						
C7						40127
C8						
C9						
C10						
C11						
C12						
CR1	1006751	DIODE				40085 THRU 40110
CR2						40083
CR3						
CR4						
CR5						
CR6						
CR7						
CR8						
L1	1006756-1	INDUCTOR	100 UH			40083
L2						
L3						40127
L4						
L5						
L6						
Q1	1006752	TRANSISTOR				40087 THRU 40110
Q2	1006753					40087 THRU 40110
Q3	1006752					40083
Q4	1006753					
Q5	1006752					



CIRCUIT NO 40127

CIRCUIT NO	A			B			C			D			E		
	SIGNAL	PIN AGC NO 4	PIN AGC NO 5	SIGNAL	PIN AGC NO 4	PIN AGC NO 5	SIGNAL	PIN AGC NO 4	PIN AGC NO 5	SIGNAN	PIN AGC NO 4	PIN AGC NO 5	SIGNAL	PIN AGC NO 4	PIN AGC NO 5
40085	SBF			BPLUSI			STBF			GND			+3M		
40086	SBE						STBE								
40087	SD00						SDR00								
40088	SD01						SDR01								
40089	SD02						SDR02								
40090	SD03						SDR03								
40091	SD04						SDR04								
40092	SD05						SDR05								
40093	SD06						SDR06								
40094	SD07						SDR07								
40095	SD08						SDR08								
40096	SD09						SDR09								
40097	SD10						SDR10								
40098	SD11						SDR11								
40099	SD12						SDR12								
40100	SD13						SDR13								
40101	SD14						SDR14								
40102	SD15						SDR15								
40103	SD16						SDR16								
40104	SD17						SDR17								
40105	SD18						SDR18								
40106	SD19						SDR19								
40107	SD20						SDR20								
40108	SD21						SDR21								
40109	SD22						SDR22								
40110	SD23						SDR23								

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 3/9/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL E. C. Hall 3/27/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL 27 Mar 63

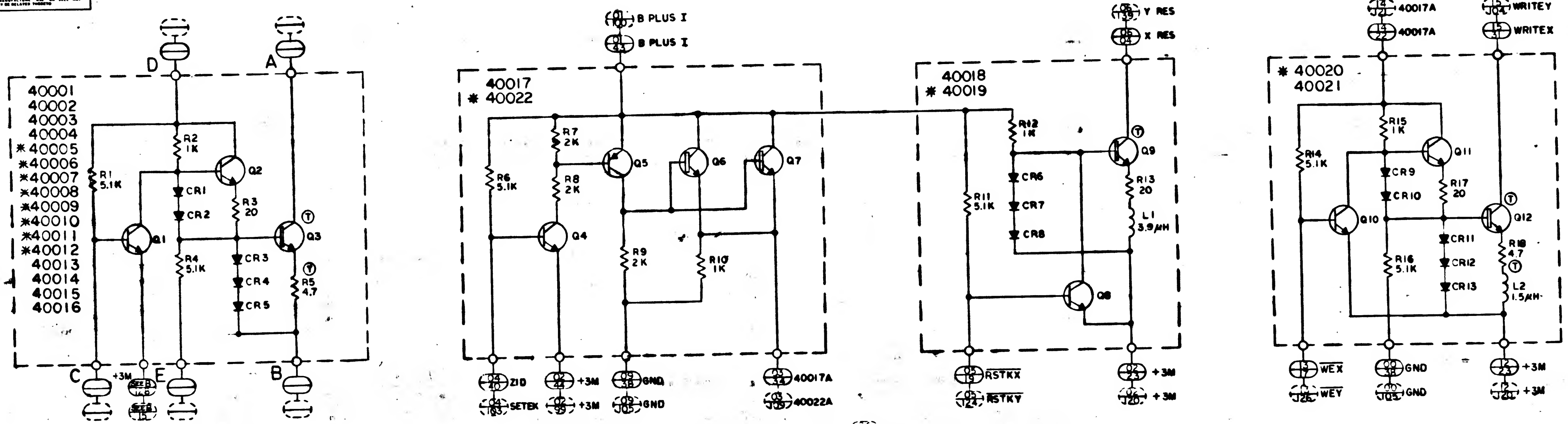
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

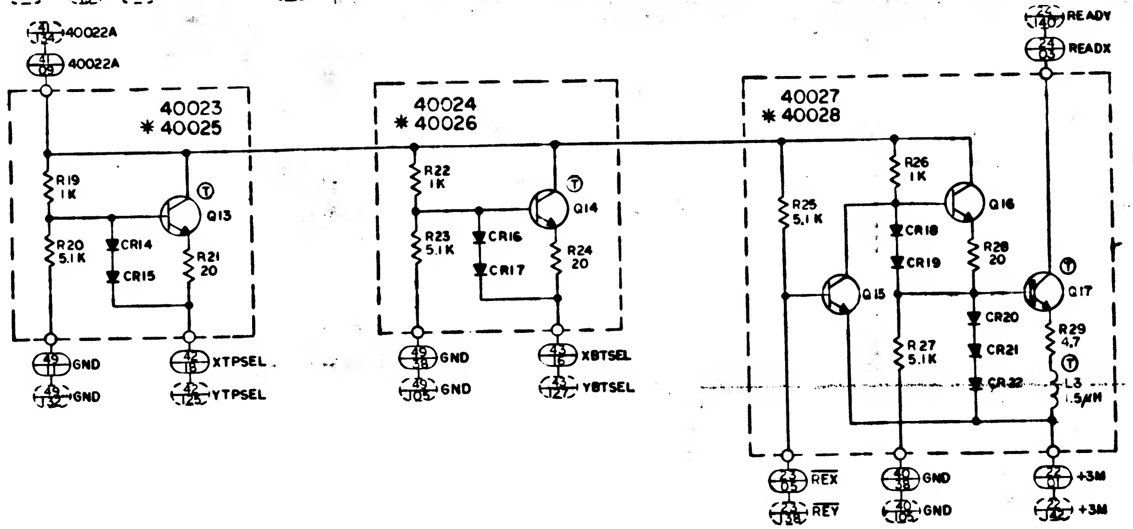
SCHEMATIC ROPE STRAND SELECT STICK

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006085
SCALE
WT
SHEET OF

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01250	5/8/63	ECh W.F.





FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 DATE 3-27-63

CIRCUIT NO.	A			B			C			D			E		
	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5
* 40005	DBF05	110	24	+3M	84	28	GEM05	100	20	40017A	90	10	GND	80	14
* 40006	DBF06	111	23	+3M	84	119	GEM06	101	27	40017A	90		GND	80	
* 40007	DBF07	112	8	+3M	85	12	GEM07	102	04	40017A	91		GND	81	
* 40008	DBF08	113	7	+3M	85	03	GEM08	103	11	40017A	91		GND	81	
* 40009	DBF09	114	56	+3M	86	60	GEM09	104	52	40017A	92		GND	82	
* 40010	DBF10	115	55	+3M	86	51	GEM10	105	59	40017A	92		GND	82	
* 40011	DBF11	116	40	+3M	87	44	GEM11	106	36	40017A	93		GND	83	
* 40012	DBF12	117	39	+3M	87	35	GEM12	107	43	40017A	93	↓	GND	83	↓
40001	DBF01	110	135	+3M	84	131	GEM01	100	139	40017A	90	133	GND	80	129
40002	DBF02	111	136	+3M	84	140	GEM02	101	132	40017A	90		GND	80	
40003	DBF03	112	119	+3M	85	115	GEM03	102	123	40017A	91		GND	81	
40004	DBF04	113	120	+3M	85	124	GEM04	103	116	40017A	91		GND	81	
40013	DBF13	114	103	+3M	86	99	GEM13	104	107	40017A	92		GND	82	
40014	DBF14	115	104	+3M	86	108	GEM14	105	100	40017A	92		GND	82	
40015	DBF15	116	87	+3M	87	83	GEM15	106	91	40017A	93		GND	83	
40016	DBF16	117	88	+3M	87	92	GEM16	107	84	40017A	93	↓	GND	83	↓

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. CIRCUIT NUMBERS ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY AN ASTERISK: *. SIGNAL NAMES AND PIN NUMBERS ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY THE DOTTED BALLOONS:

REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
R1	1006750-49	RESISTOR	5.1K		1/4 W	40005 40006 40007 40008 40009 40010 40011 40012	40001 40002 40003 40004 40013 40014 40015 40016
R2	1006750-32		1K				
R3	1006788-8		20				
R4	1006750-49		5.1K				
R5	1006788-01	↓	4.7		↓		
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
CR5	↓	↓					
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759	↓					
R6	1006750-49	RESISTOR	5.1K		1/4 W	40017	40022
R7	-39		2K				
R8	-39		2K				
R9	-39		2K				
R10	-32		1K			↓	↓
R11	-49		5.1K			40018	40019
R12	↓ -32		1K				
R13	1006786-8		20			↓	↓
R14	1006750-49		5.1K			40021	40020
R15	-32		1K				
R16	↓ -49		5.1K				
R17	1006788-8		20				
R18	1006788-01		4.7			↓	↓
R19	1006750-32		1K			40023	40025
R20	↓ -49		5.1K				
R21	1006788-8		20			↓	↓
R22	1006750-32		1K			40024	40026
R23	↓ -49		5.1K				
R24	1006788-8		20			↓	↓
R25	1006750-49		5.1K			40027	40028
R26	-32		1K				
R27	↓ -49		5.1K				
R28	1006788-8		20				
R29	1006788-01	↓	4.7		↓	↓	↓
CR6	1006751	DIODE				40018	40019
CR7							
CR8						↓	↓
CR9						40021	40020
CR10							
CR11							
CR12							
CR13	↓	↓				↓	↓

REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
CR22	↓	↓				↓	↓
L1	1010406-11	INDUCTOR	3.9µH			40018	40019
L2	-9		1.5µH			40021	40020
L3	↓ -9	↓	1.5µH			40027	40028
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759					↓	↓
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759					↓	↓
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16	↓						
Q17	1006759	↓				↓	↓

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO CONTRACT
DRAWN Frank J. Walker DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL Eldon C. Hall 3/27/63
NASA APPROVAL W. J. Rhine 3-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

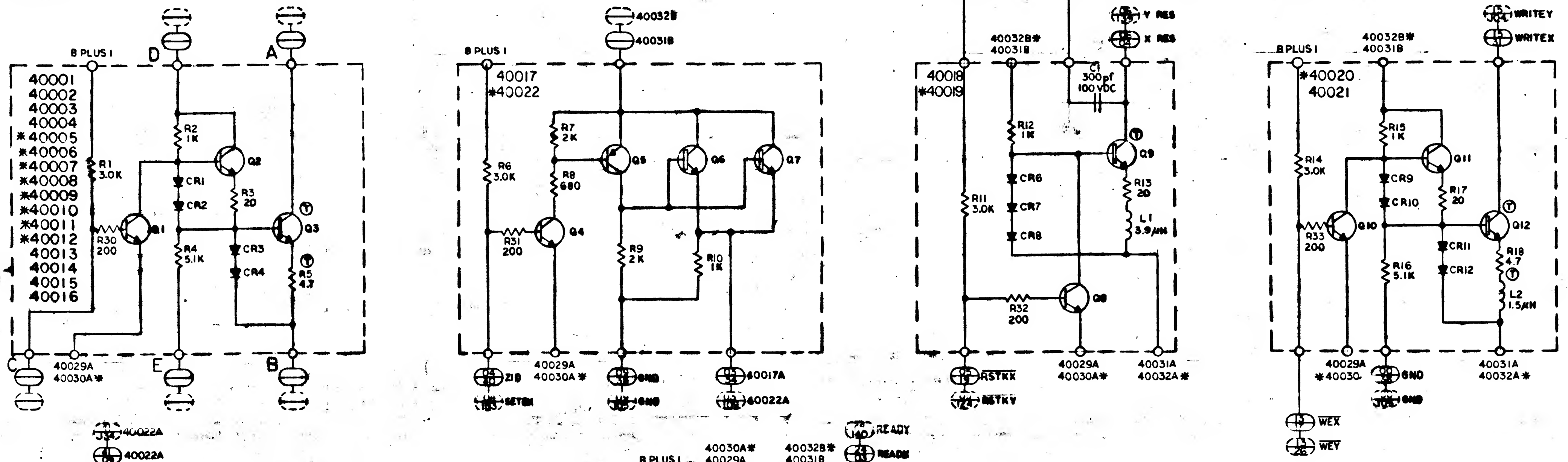
SCHEMATIC
ERASABLE DRIVERS STICK

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006086
SCALE
WT
SHEET 1 OF 1

1006086 A

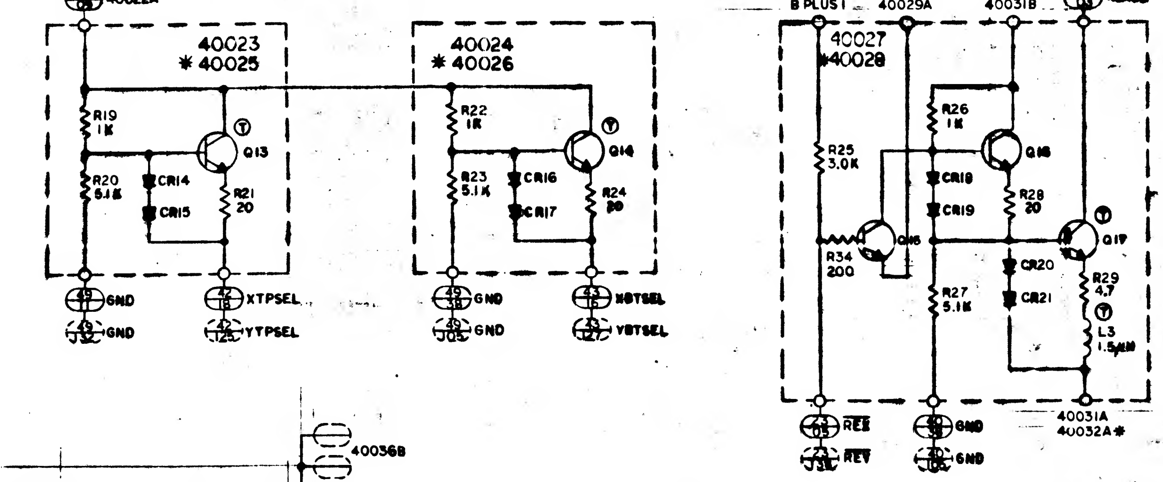
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01250	5/8/63	
B	REVISED PER TDRR 02051	7/17/63	

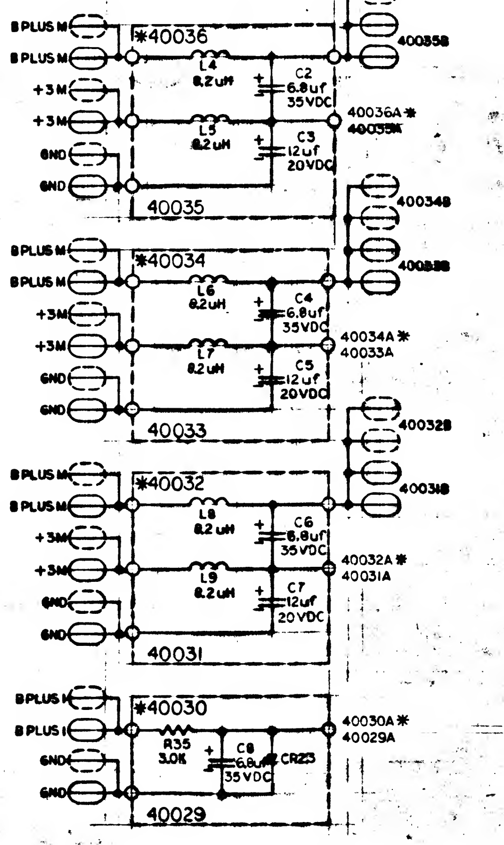


FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 0062 DATE 3-27-63



CIRCUIT NO.	A			B			C			D			E		
	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5
✱ 40005	DBF05	110	24	40036A	84	28	GEM05	100	20	40017A	90	10	GND	80	14
✱ 40006	DBF06	111	23		84	119	GEM06	101	27	40017A	90		GND	80	
✱ 40007	DBF07	112	8		85	12	GEM07	102	04	40017A	91		GND	81	
✱ 40008	DBF08	113	7		85	03	GEM08	103	11	40017A	91		GND	81	
✱ 40009	DBF09	114	56	40034A	86	60	GEM09	104	52	40017A	92		GND	82	
✱ 40010	DBF10	115	55		86	51	GEM10	105	59	40017A	92		GND	82	
✱ 40011	DBF11	116	40		87	44	GEM11	106	36	40017A	93		GND	83	
✱ 40012	DBF12	117	39		87	35	GEM12	107	43	40017A	93		GND	83	
40001	DBF01	110	135	40035A	84	131	GEM01	100	139	40017A	90	133	GND	80	129
40002	DBF02	111	136		84	140	GEM02	101	132	40017A	90		GND	80	
40003	DBF03	112	119		85	115	GEM03	102	123	40017A	91		GND	81	
40004	DBF04	113	120		85	124	GEM04	103	116	40017A	91		GND	81	
40013	DBF13	114	103	40033A	86	99	GEM13	104	107	40017A	92		GND	82	
40014	DBF14	115	104		86	108	GEM14	105	100	40017A	92		GND	82	
40015	DBF15	116	87		87	83	GEM15	106	91	40017A	93		GND	83	
40016	DBF16	117	88		87	92	GEM16	107	84	40017A	93		GND	83	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
R1	1006750-43	RESISTOR	3.0K		1/4 W	40005 40006 40007 40008 40009 40010 40011 40012	40001 40002 40003 40004 40013 40014 40015 40016
R2	1006750-32		1K				
R3	1006788-6		20				
R4	1006750-49		5.1K				
R5	1006788-01		4.7				
R30	1006750-15		200				
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
~~CR5~~							
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759						
R6	1006750-43	RESISTOR	3.0K		1/4 W	40017	40022
R7	-39		2K				
R8	-28		680				
R9	-39		2K				
R10	-32		1K				
R11	-43		3.0K			40018	40019
R12	-32		1K				
R13	1006788-8		20				
R14	1006750-43		3.0K			40021	40020
R15	-32		1K				
R16	[illegible]		[illegible]				
R17	10067[illegible]-8		20				
R18	10067[illegible]-01		4.7				
R19	10067[illegible]-32		1K			40023	40025
R20	-49		5.1K				
R21	1006[illegible]-8		20				
R22	1006[illegible]		1K			40024	40024
R23	[illegible]		[illegible]				
R24	1006[illegible]-8		20				
R25	[illegible]		3.0K			[illegible]	[illegible]
R26	[illegible]		1K				
R27	-49		5.1K				
R28	1006788-8		20				
R29	1006[illegible]-01		4.7				
R31	1006750-15		200			40017	40022
R32	-15		200			40018	40019
R33	-15		200			40021	40020
R34	-15		200			40027	40028
R35	-43		3.0K			40029	40030
CR6	1006751	DIODE				40018	40019
CR7							
CR8							
CR9						40021	40020
CR10							
CR11							
CR12							
~~CR13~~							

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
~~CR22~~							
CR23						40029	40030
L1	1010406-11	INDUCTOR				40018	40019
L2	-9					40021	40020
L3	-9					40027	40028
L4	-7					40035	40036
L5	-7					40035	40036
L6	-7					40033	40034
L7	-7					40033	40034
L8	-7					40031	40032
L9	-7					40031	40032
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759						
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	[illegible]					40021	40020
Q11	1006752						
Q12	1006759						
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16							
Q17	1006759						
C1	1006777-18	CAPACITOR	300pf		100VDC	40018	40019
C2	1006755-79		6.8µf		35VDC	40035	40036
C3	1006755-32		12µf		20VDC	40035	40036
C4	1006755-79		6.8µf		35VDC	40033	40034
C5	1006755-32		12µf		20VDC	40033	40034
C6	1006755-79		6.8µf		35VDC	40031	40032
C7	1006755-32		12µf		20VDC	40031	40032
C8	1006755-79		6.8µf		35VDC	40029	40030

NOTES

1. INTERPRET DRAWING PER STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE EXPRESSED IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY AN ASTERISK (✱) OR BY DOTTED BALLOONS ( )

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL Eldon C Hall 3/22/63
NASA APPROVAL W. J. Rhine 3-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

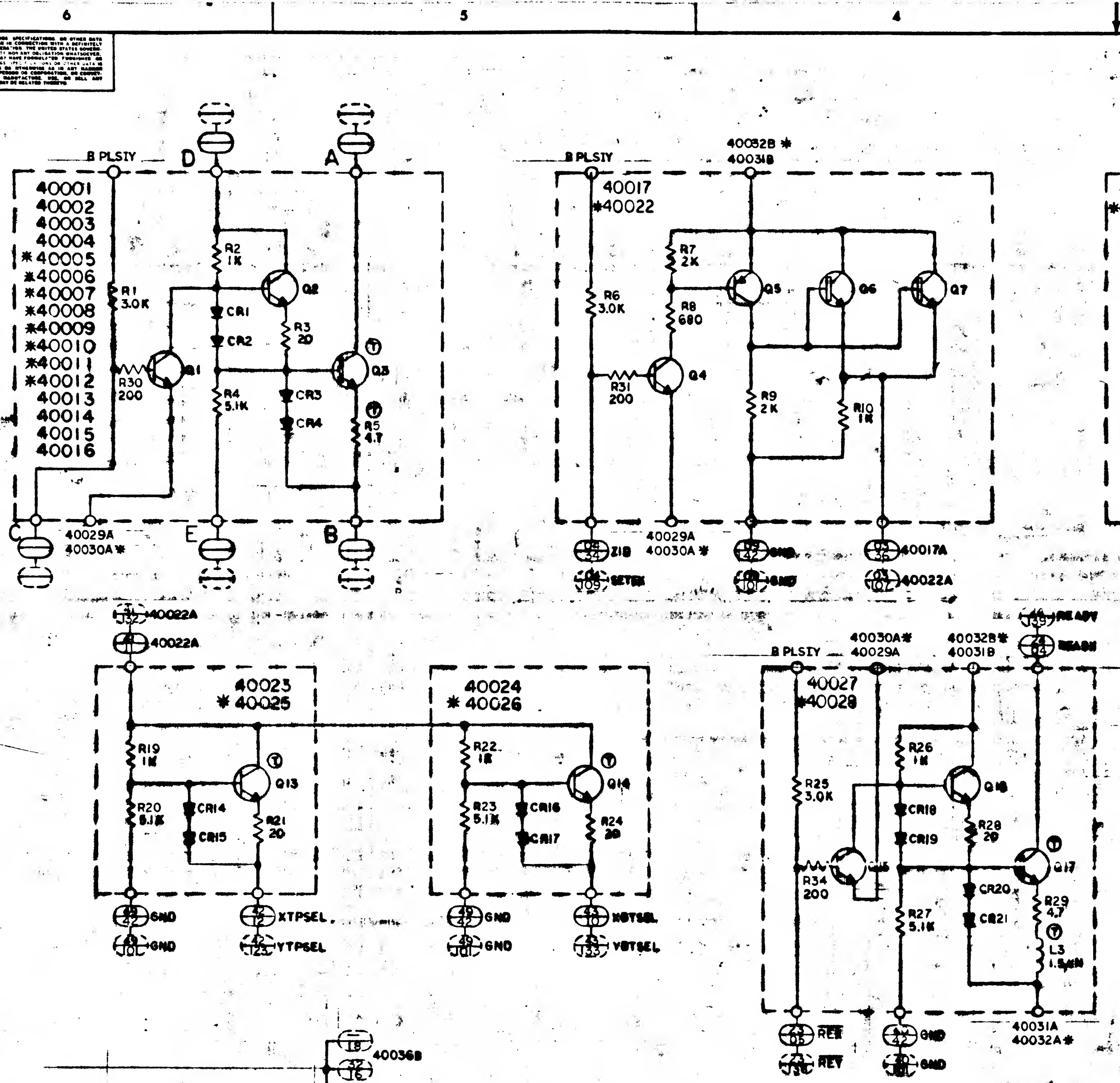
SCHEMATIC
ERASABLE DRIVERS STICK

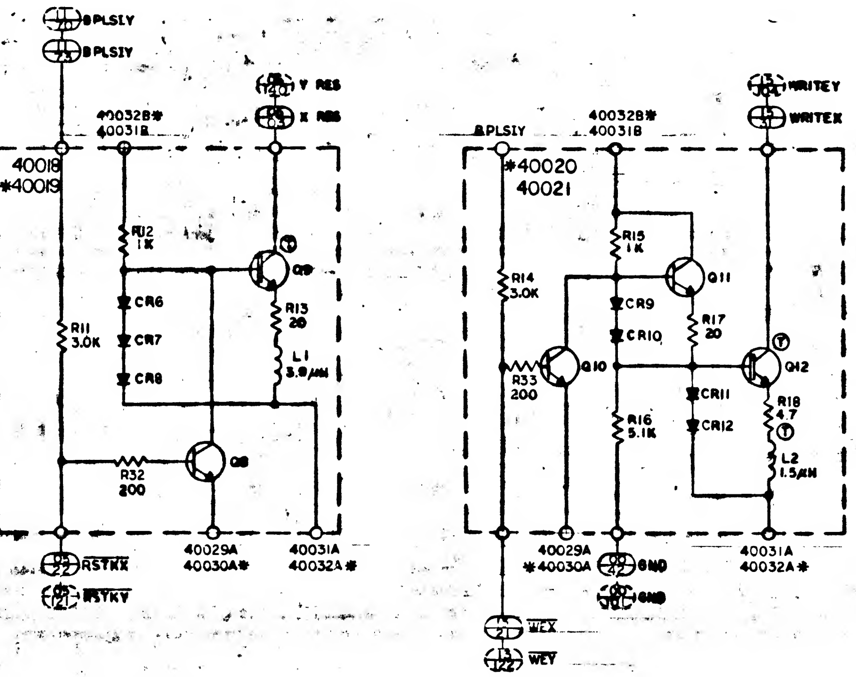
CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006086
SCALE | WT | SHEET 1 OF 1

1006086 B

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01280	5/8/63	
B	REVISED PER TDRR 02051	7/17/63	
C	REVISED PER TDRR 02283	9-20-63	

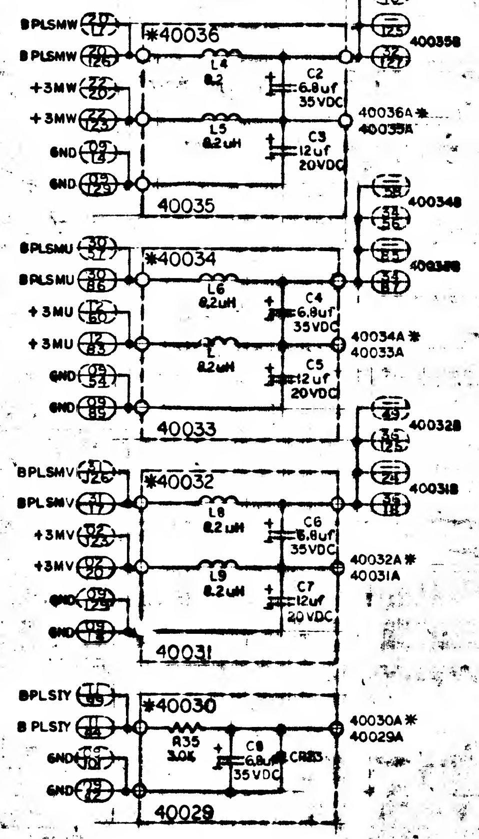




FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00691 DATE 9-30-63

COMPONENT PREFIX* (ASSY)	CIRCUIT NO.	A SIGNAL NAME	A PIN NO. AGC 4	A PIN NO. AGC 5	B SIGNAL NAME	B PIN NO. AGC 4	B PIN NO. AGC 5	C SIGNAL NAME	C PIN NO. AGC 4	C PIN NO. AGC 5	D SIGNAL NAME	D PIN NO. AGC 4	D PIN NO. AGC 5	E SIGNAL NAME	E PIN NO. AGC 4	E PIN NO. AGC 5
3	* 40005	DBF05	110	28	40036A	84	INTERNALLY CONNECTED	GEM05	100	22	40017A	90	37	GND	80	52
4	* 40006	DBF06	111	27		84		GEM06	101	31	40017A	90		GND	80	
1	* 40007	DBF07	112	8		85		GEM07	102	04	40017A	91		GND	81	
2	* 40008	DBF08	113	7		85		GEM08	103	11	40017A	91		GND	81	
7	* 40009	DBF09	114	68	40034A	86		GEM09	104	62	40017A	92		GND	88	
8	* 40010	DBF10	115	67		86		GEM10	105	71	40017A	92		GND	88	
5	* 40011	DBF11	116	48		87		GEM11	106	44	40017A	93		GND	89	
6	* 40012	DBF12	117	47		87		GEM12	107	51	40017A	93		GND	89	
1	40001	DBF01	110	135	40035A	84		GEM01	100	139	40017A	90	106	GND	80	91
2	40002	DBF02	111	136		84		GEM02	101	132	40017A	90		GND	80	
3	40003	DBF03	112	115		85		GEM03	102	121	40017A	91		GND	81	
4	40004	DBF04	113	116		85		GEM04	103	112	40017A	91		GND	81	
5	40013	DBF13	114	95	40033A	86		GEM13	104	99	40017A	92		GND	88	
6	40014	DBF14	115	96		86		GEM14	105	92	40017A	92		GND	88	
7	40015	DBF15	116	75		87		GEM15	106	81	40017A	93		GND	89	
8	40016	DBF16	117	76		87		GEM16	107	72	40017A	93		GND	89	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON STICK NO. 1	CIRCUIT NO. USED ON STICK NO. 2
R1	1006750-43	RESISTOR	3.0K		1/4 W		
R2	1006750-32		1K				
R3	1006788-8		20				
R4	1006750-49		5.1K				
R5	1006788-01		4.7			40005 40006 40007 40008 40009 40010 40011 40012	40001 40002 40003 40004 40013 40014 40015 40016
R30	1006750-15		200				
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
CR5							
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759						
R6	1006750-43	RESISTOR	3.0K		1/4 W	40017	40022
R7	-39		2K				
R8	-28		680				
R9	-39		2K				
R10	-32		1K				
R11	-43		3.0K			40018	40019
R12	-32		1K				
R13	1006788-8		20				
R14	1006750-43		3.0K			40021	40020
R15	-32		1K				
R16	-49		5.1K				
R17	1006788-8		20				
R18	1006788-01		4.7				
R19	1006750-32		1K			40023	40025
R20	-49		5.1K				
R21	1006788-		20				
R22	[illegible]		[illegible]			40024	40026
R23	-49		5.1K				
R24	1006788-8		20				
R25	1006750-43		3.0K			40027	40028
R26	-32		1K				
R27	-49		5.1K				
R28	1006788-8		20				
R29	1006788-01		4.7				
R31	1006750-15		200			40017	40022
R32	-15		200			40018	40019
R33	-15		200			40021	40020
R34	-15		200			40027	40028
R35	-43		3.0K			40029	40030
CR6	1006751	DIODE				40018	40019
CR7							
CR8							
CR9						40021	40020
CR10							
CR11							
CR12							
CR13							

REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON STICK NO. 1	CIRCUIT NO. USED ON STICK NO. 2
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
CR22							
CR23						40029	40030
L1	1010406-11	INDUCTOR				40018	40019
L2	-9					40021	40020
L3	-9					40027	40028
L4	-7					40035	40036
L5	-7					40035	40036
L6	-7					40033	40034
L7	-7					40033	40034
L8	-7					40031	40032
L9	-7					40031	40032
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006751						
Q8	1006752					40018	40019
Q9	1006753					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759						
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16							
Q17	1006759						
~~C1~~	~~1006777-19~~	CAPACITOR	~~300μf~~		~~100VDC~~	~~40018~~	~~40019~~
C2	1006755-79		6.8μf		35 VDC	40035	40036
C3	1006755-32		12μf		20 VDC	40035	40036
C4	1006755-79		6.8μf		35 VDC	40033	40034
C5	1006755-32		12μf		20 VDC	40033	40034
C6	1006755-79		6.8μf		35 VDC	40031	40032
C7	1006755-32		12μf		20 VDC	40031	40032
C8	1006755-79		6.8μf		35 VDC	40029	40030

NOTES

1. INTERPRET DRAWING PER STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE EXPRESSED IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY AN ASTERISK (*) OR BY DOTTED BALLOONS ( )

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins
APPROVAL 3/27/63
NASA APPROVAL W. J. Rhine 3-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

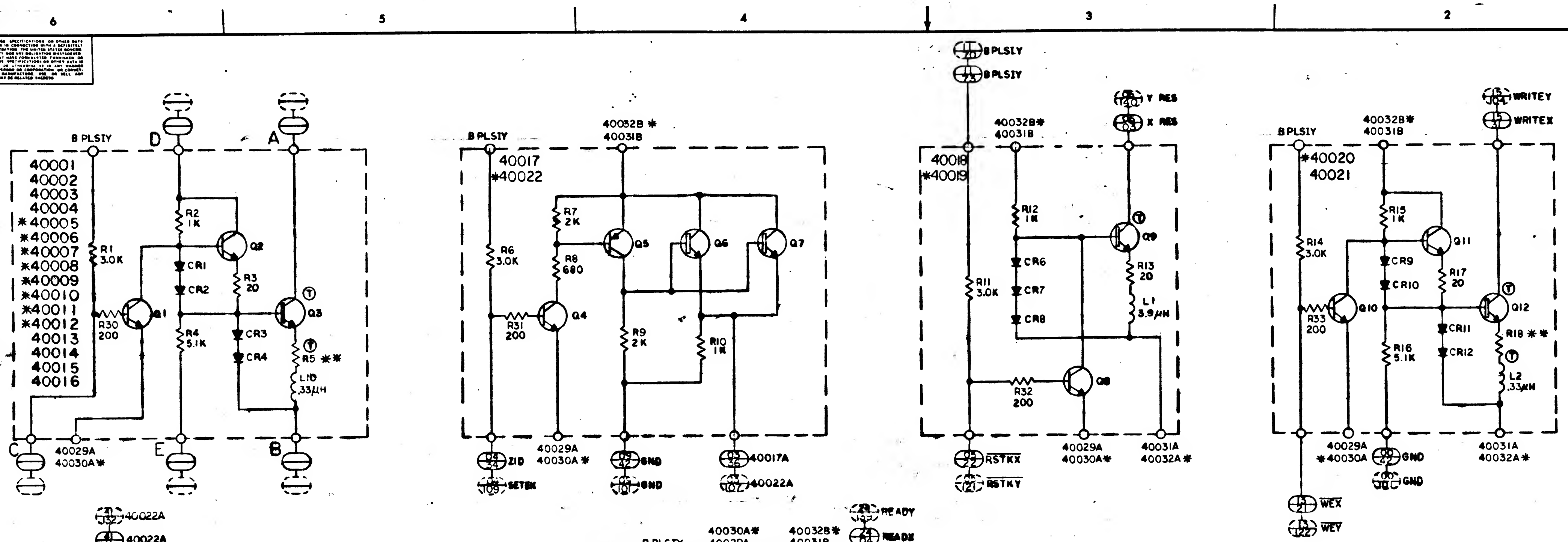
SCHEMATIC, ERASABLE DRIVERS STICK

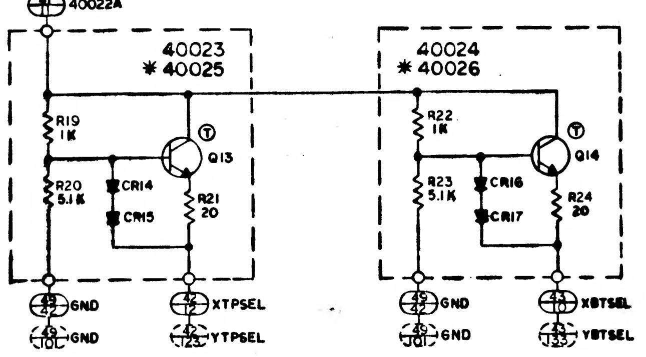
CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006086
SCALE — | WT — | SHEET 1 OF 1

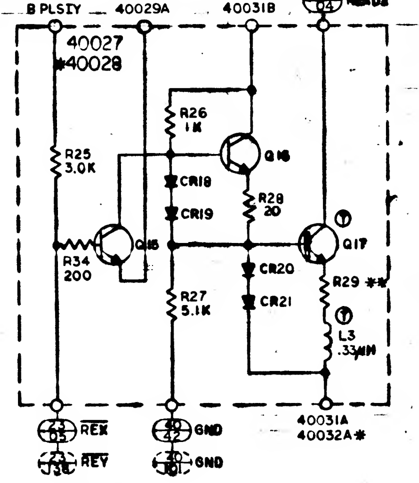
1006086 C

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

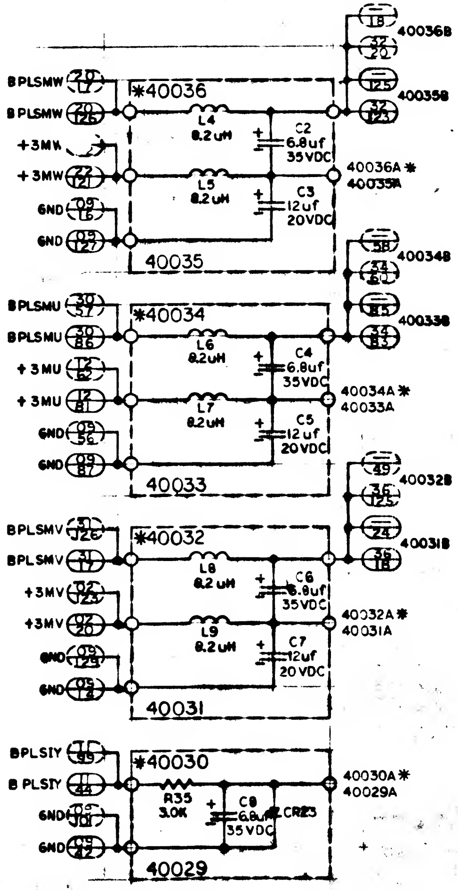
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01250	5/8/63	WK
B	REVISED PER TDRR 02051	7/17/63	
C	REVISED PER TDRR 02283	7/30-63	7/31
D	REVISED AND UPGRADED TO CLASS A PER TDRR 03047	10 Sep 63	







COMPONENT PREFIX# (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL NAME	PIN NO. AGC 4	PIN NO. AGC 5
3	✱ 40005	DBF05	110	28	40036A	84	INTERNALLY CONNECTED	GEM05	100	26	40017A	90	37	GND	80	52
4	✱ 40006	DBF06	111	25		84		GEM06	101	27	40017A	90		GND	80	
1	✱ 40007	DBF07	112	8		85		GEM07	102	06	40017A	91		GND	81	
2	✱ 40008	DBF08	113	7		85		GEM08	103	09	40017A	91		GND	91	
7	✱ 40009	DBF09	114	68	40034A	86		GEM09	104	66	40017A	92		GND	88	
8	✱ 40010	DBF10	115	65		86		GEM10	105	67	40017A	92		GND	88	
5	✱ 40011	DBF11	116	50		87		GEM11	106	48	40017A	93		GND	89	
6	✱ 40012	DBF12	117	47		87		GEM12	107	49	40017A	93		GND	89	
1	40001	DBF01	110	135	40035A	84		GEM01	100	137	40017A	90	106	GND	80	91
2	40002	DBF02	111	136		84		GEM02	101	134	40017A	90		GND	80	
3	40003	DBF03	112	115		85		GEM03	102	117	40017A	91		GND	81	
4	40004	DBF04	113	118		85		GEM04	103	116	40017A	91		GND	81	
5	40013	DBF13	114	93	40033A	86		GEM13	104	95	40017A	92		GND	88	
6	40014	DBF14	115	96		86		GEM14	105	94	40017A	92		GND	88	
7	40015	DBF15	116	75		87		GEM15	106	77	40017A	93		GND	89	
8	40016	DBF16	117	78		87		GEM16	107	76	40017A	93		GND	89	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
R1	1006750-43	RESISTOR	3.0K		1/4 W	40005 40006 40007 40008 40009 40010 40011 40012	40001 40002 40003 40004 40013 40014 40015 40016
R2	1006750-32		1K				
R3	1006788-8		20				
R4	1006750-49		5.1K				
R5	1006788-	SEE CHART					
R30	1006750-15		200				
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
~~CR5~~							
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759						
R6	1006750-45	RESISTOR	3.0K		1/4 W	40017	40022
R7	-39		2K				
R8	-28		680				
R9	-39		2K				
R10	-32		1K				
R11	-43		3.0K			40018	40019
R12	-32		1K				
R13	1006788-8		20				
R14	1006750-43		3.0K			40021	40020
R15	-32		1K				
R16	-49		5.1K				
R17	1006788-8		20				
R18	1006788-	SEE CHART					
R19	1006750-32		1K			40023	40025
R20	-49		5.1K				
R21	1006788-8		20				
R22	1006750-32		1K			40024	40026
R23	-49		5.1K				
R24	1006788-8		20				
R25	1006750-43		3.0K			40027	40028
R26	-32		1K				
R27	-49		5.1K				
R28	1006788-8		20				
R29	1006788-	SEE CHART					
R31	1006750-15		200			40017	40022
R32	-15		200			40018	40019
R33	-15		200			40021	40020
R34	-15		200			40027	40028
R35	-43		3.0K			40029	40030
CR6	1006751	DIODE				40018	40019
CR7							
CR8							
CR9						40021	40020
CR10							
CR11							
CR12							
~~CR13~~							

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
~~CR22~~							
CR23						40029	40030
L1	1010406-11	INDUCTOR	3.9µH			40018	40019
L2	-17		0.33µH			40021	40020
L3	-17		0.33µH			40027	40028
L4	-7		8.2µH			40035	40036
L5	-7					40035	40036
L6	-7					40033	40034
L7	-7					40033	40034
L8	-7					40031	40032
L9	-7					40031	40032
L10	-17		0.33µH			40005-40012	40013-40016
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759						
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759						
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16							
Q17	1006759						
~~C1~~	~~1006777-18~~	CAPACITOR	~~300pf~~		~~200VDC~~	~~40018~~	~~40019~~
C2	1006755-79		6.8µf		35VDC	40035	40036
C3	1006755-32		12µf		20VDC	40035	40036
C4	1006755-79		6.8µf		35VDC	40033	40034
C5	1006755-32		12µf		20VDC	40033	40034
C6	1006755-79		6.8µf		35VDC	40031	40032
C7	1006755-32		12µf		20VDC	40031	40032
C8	1006755-79		6.8µf		35VDC	40029	40030

R5,R18,R29 SEE NOTE 5	
VALUE	PART NO.
1.7	1006788-16
1.75	-17
1.8	-18
1.85	-19
1.9	-20
1.95	-21
2.0	-22
2.05	-23
2.1	-24
2.15	-25
2.2	-26
2.25	-27
2.3	-28
2.5	-29
2.6	-30
2.7	-31
2.8	-32
2.9	-33
3.0	-34
3.1	-35

NOTES
1. INTERPRET DRAWING PER STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE EXPRESSED IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR MODULE B11 ARE INDICATED BY AN ASTERISK (✱) OR BY DOTTED BALLOONS ( )
4. DENOTES AGC 4 PIN NO.
DENOTES AGC 5 PIN NO.
5. ✱✱ TO BE SELECTED BY ELECTRICAL TEST

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL 3/27/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE DRIVERS MODULE B10 AND B11

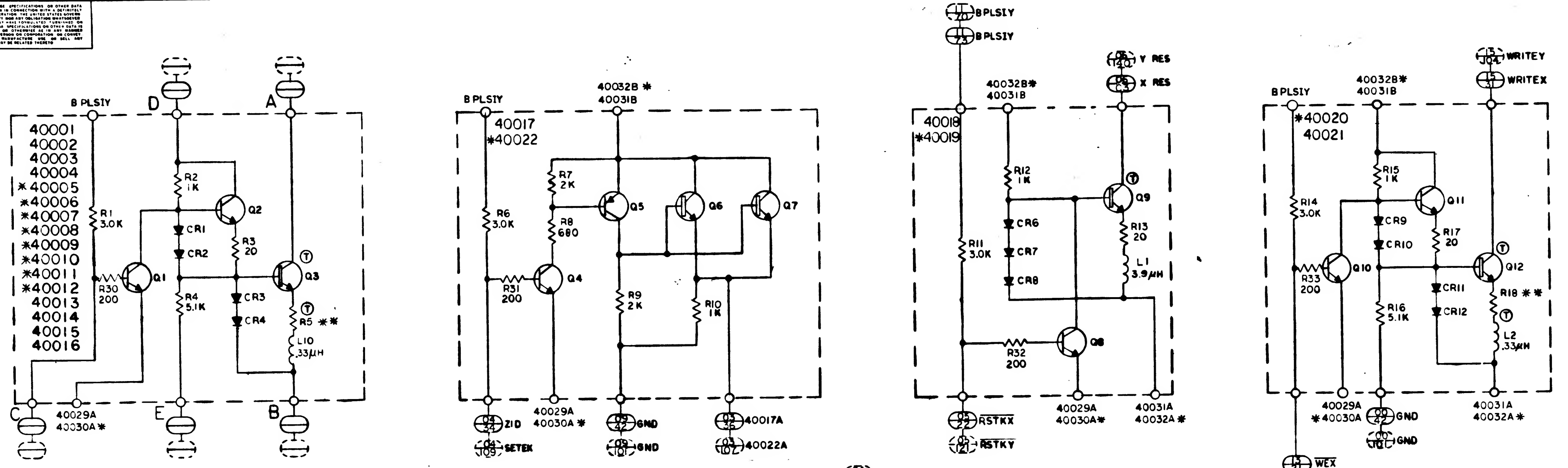
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006086
SCALE — WT — SHEET 1 OF 1

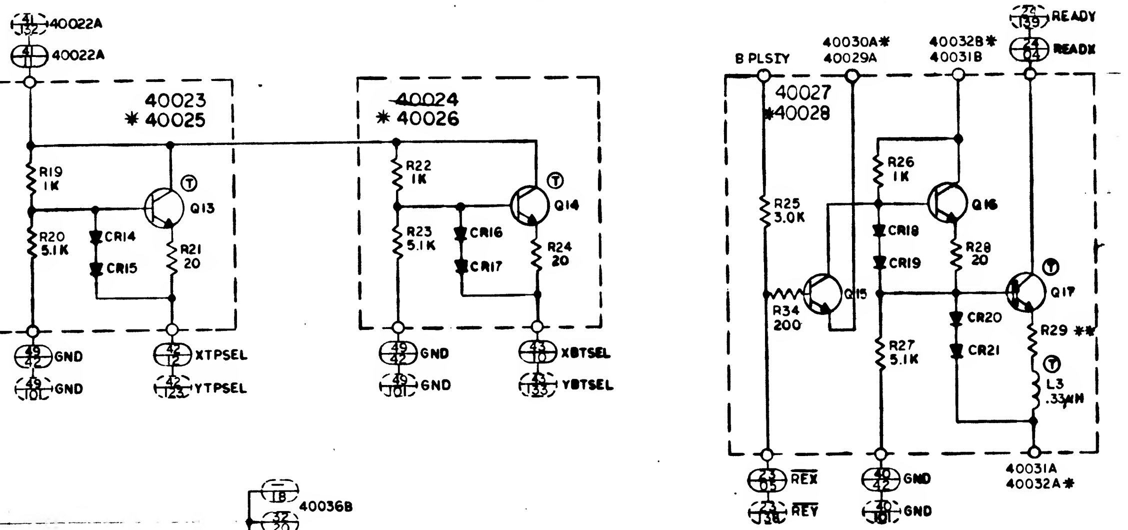
1006086 D

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

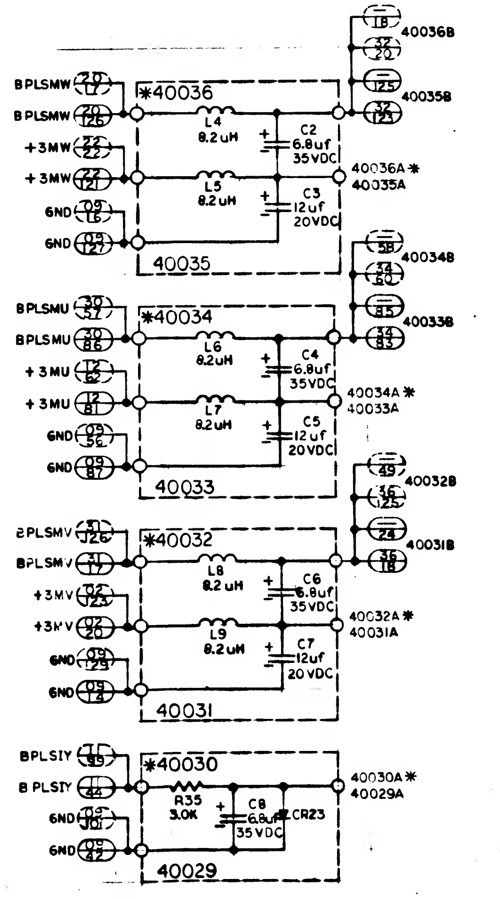
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01250	5/8/63	WK
B	REVISED PER TDRR 02051	7/17/63	
C	REVISED PER TDRR 02283	7/30-63	7/31
D	REVISED AND UPGRADED TO CLASS A PER TDRR 03047	10 Sep 63	WK
E	REVISED PER TDRR 03175	9-26-63	W.K.





COMPONENT PREFIX* (ASSY)	CIRCUIT NO.	A SIGNAL NAME	A PIN NO. AGC 4	A PIN NO. AGC 5	B SIGNAL NAME	B PIN NO. AGC 4	B PIN NO. AGC 5	C SIGNAL NAME	C PIN NO. AGC 4	C PIN NO. AGC 5	D SIGNAL NAME	D PIN NO. AGC 4	D PIN NO. AGC 5	E SIGNAL NAME	E PIN NO. AGC 4	E PIN NO. AGC 5
3	* 40005	DBF05	110	28	40036A	84	INTERNALLY CONNECTED	GEM05	100	26	40017A	90	37	GND	80	52
4	* 40006	DBF06	111	25		84		GEM06	101	27	40017A	90		GND	80	
1	* 40007	DBF07	112	8		85		GEM07	102	06	40017A	91		GND	81	
2	* 40008	DBF08	113	7		85		GEM08	103	09	40017A	91		GND	81	
7	* 40009	DBF09	114	68	40034A	86		GEM09	104	66	40017A	92		GND	88	
8	* 40010	DBF10	115	65		86		GEM10	105	67	40017A	92		GND	88	
5	* 40011	DBF11	116	50		87		GEM11	106	48	40017A	93		GND	89	
6	* 40012	DBF12	117	47		87		GEM12	107	49	40017A	93		GND	89	
1	40001	DBF01	110	135	40035A	84		GEM01	100	137	40017A	90	106	GND	80	91
2	40002	DBF02	111	136		84		GEM02	101	134	40017A	90		GND	80	
3	40003	DBF03	112	115		85		GEM03	102	117	40017A	91		GND	81	
4	40004	DBF04	113	118		85		GEM04	103	116	40017A	91		GND	81	
5	40013	DBF13	114	93	40033A	86		GEM13	104	95	40017A	92		GND	88	
6	40014	DBF14	115	96		86		GEM14	105	94	40017A	92		GND	88	
7	40015	DBF15	116	75		87		GEM15	106	77	40017A	93		GND	89	
8	40016	DBF16	117	78		87		GEM16	107	76	40017A	93		GND	89	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON: TRAY POS B10	CIRCUIT NO. USED ON: TRAY POS B11
R1	1006750-43	RESISTOR	3.0K		1/4 W	40001 40002 40003 40004 40013 40014 40015 40016	40005 40006 40007 40008 40009 40010 40011 40012
R2	1006750-32		1K				
R3	1006788-8		20				
R4	1006750-49		5.1K				
R5	1006788-	SEE CHART					
R30	1006750-15		200				
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
~~CR5~~							
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759						
R6	1006750-45	RESISTOR	3.0K		1/4 W	40017	40022
R7	-39		2K				
R8	-28		680				
R9	-39		2K				
R10	-32		1K				
R11	-43		3.0K			40018	40019
R12	-32		1K				
R13	1006788-8		20				
R14	1006750-43		3.0K			40021	40020
R15	-32		1K				
R16	-49		5.1K				
R17	1006788-8		20				
R18	1006788-	SEE CHART					
R19	1006750-32		1K			40023	40025
R20	-49		5.1K				
R21	1006788-8		20				
R22	1006750-32		1K			40024	40026
R23	-49		5.1K				
R24	1006788-8		20				
R25	1006750-43		3.0K			40027	40028
R26	-32		1K				
R27	-49		5.1K				
R28	1006788-8		20				
R29	1006788-	SEE CHART					
R31	1006750-15		200			40017	40022
R32	-15		200			40018	40019
R33	-15		200			40021	40020
R34	-15		200			40027	40028
R35	-43		3.0K			40029	40030
CR6	1006751	DIODE				40018	40019
CR7							
CR8							
CR9						40021	40020
CR10							
CR11							
CR12							
~~CR13~~							

REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON: TRAY POS B10	CIRCUIT NO. USED ON: TRAY POS B11
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
~~CR22~~							
CR23						40029	40030
L1	1010406-11	INDUCTOR	3.9μH			40018	40019
L2	-17		0.33μH			40021	40020
L3	-17		0.33μH			40027	40028
L4	-7		8.2μH			40035	40036
L5	-7					40035	40036
L6	-7					40033	40034
L7	-7					40033	40034
L8	-7					40031	40032
L9	-7					40031	40032
L10	-17		0.33μH			40005-40012	40013-40016
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759						
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759						
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16							
Q17	1006759						
~~C1~~	~~1006777-18~~	CAPACITOR	~~300pf~~		~~100VDC~~	~~40018~~	~~40019~~
C2	1006755-79		6.8μf		35VDC	40035	40036
C3	1006755-32		12μf		20VDC	40035	40036
C4	1006755-79		6.8μf		35VDC	40033	40034
C5	1006755-32		12μf		20VDC	40033	40034
C6	1006755-79		6.8μf		35VDC	40031	40032
C7	1006755-32		12μf		20VDC	40031	40032
C8	1006755-79		6.8μf		35VDC	40029	40030

R5,R18,R29 SEE NOTE 5	
VALUE	PART NO.
1.7	1006788-16
1.75	-17
1.8	-18
1.85	-19
1.9	-20
1.95	-21
2.0	-22
2.05	-23
2.1	-24
2.15	-25
2.2	-26
2.25	-27
2.3	-28
2.5	-29
2.6	-30
2.7	-31
2.8	-32
2.9	-33
3.0	-34
3.1	-35

NOTES

1. INTERPRET DRAWING PER STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE EXPRESSED IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR TRAY POS B11 ARE INDICATED BY AN ASTERISK (*) OR BY DOTTED BALLOONS
4. 115 — DENOTES AGC 4 PIN NO.; 92 — DENOTES AGC 5 PIN NO.
5. ** TO BE SELECTED BY ELECTRICAL TEST

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO CONTRACT
DRAWN DATE 3/20/63
CHECKED
APPROVAL Albert Hopkins
APPROVAL 3/27/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL 27 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

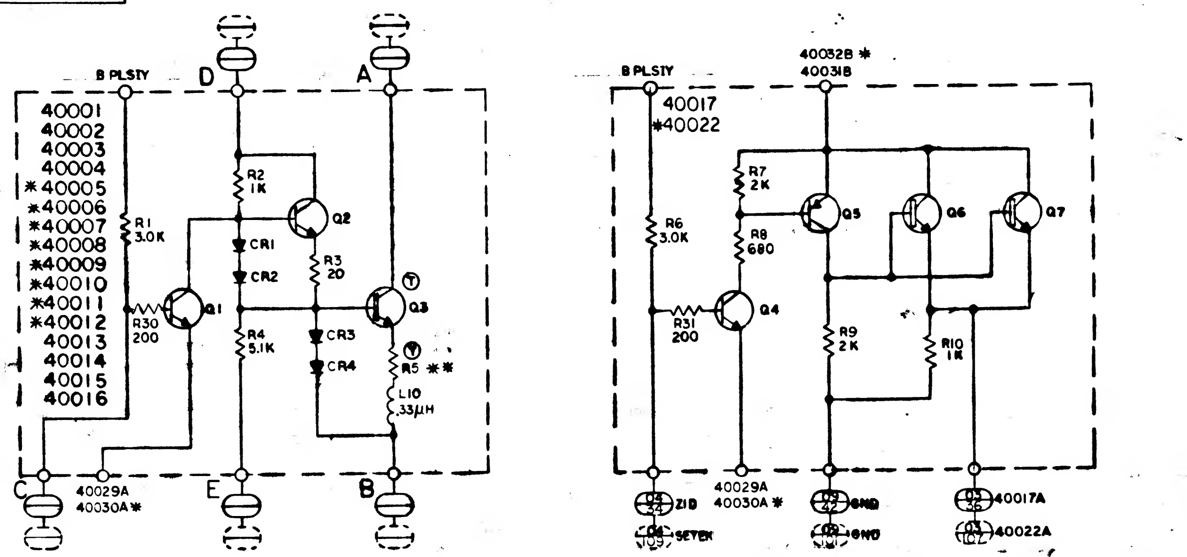
SCHEMATIC, ERASABLE DRIVERS MODULE B10 AND B11

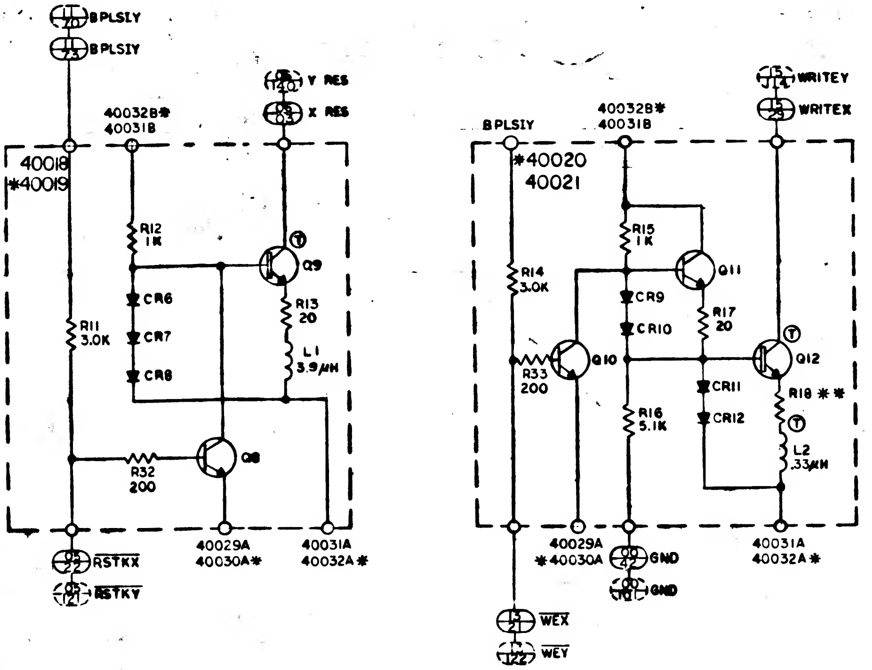
CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006086
SCALE — WT — SHEET 1 OF 1

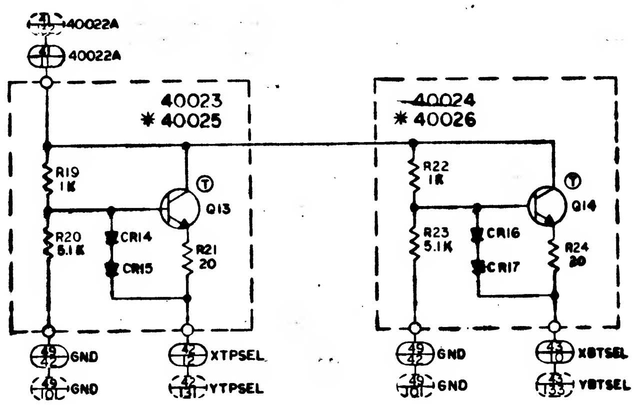
INCHES
PHOTOGRAPHIC SCALE ONLY

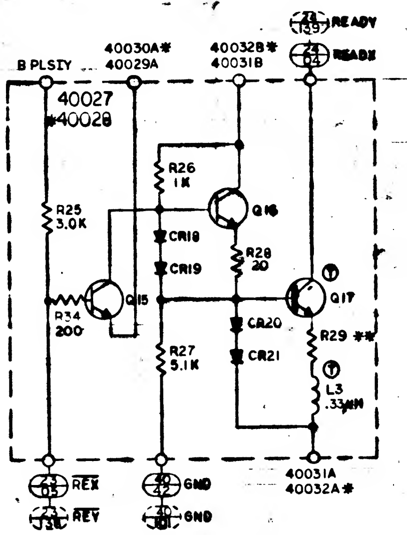
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01250	5/8/63	WK
B	REVISED PER TDRR 02051	7/17/63	
C	REVISED PER TDRR 02283	7/30-63	
D	REVISED AND UPGRADED TO CLASS A PER TDRR 03047		WK
E	REVISED PER TDRR 03175	9-16-63	WK
F	REVISED PER TDRR 03641	10-3-63	WK

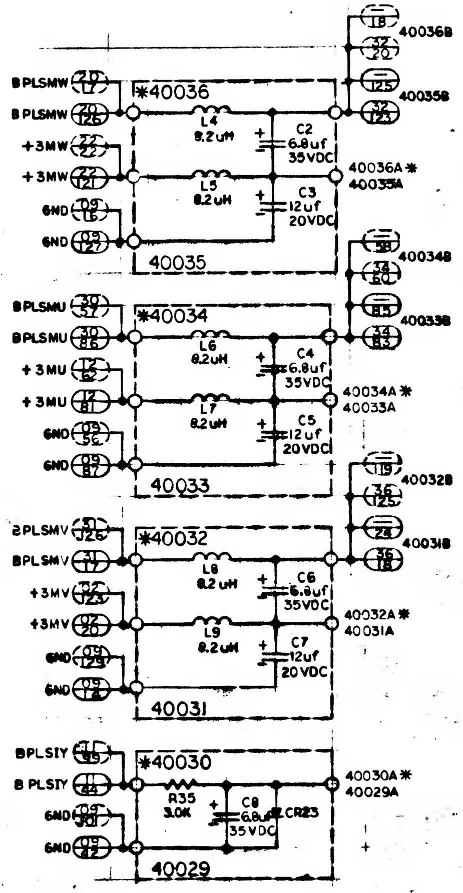








COMPONENT PREFIX✱ (ASSY)	CIRCUIT NO.	A SIGNAL NAME	A PIN NO. AGC 4	A PIN NO. AGC 5	B SIGNAL NAME	B PIN NO. AGC 4	B PIN NO. AGC 5	C SIGNAL NAME	C PIN NO. AGC 4	C PIN NO. AGC 5	D SIGNAL NAME	D PIN NO. AGC 4	D PIN NO. AGC 5	E SIGNAL NAME	E PIN NO. AGC 4	E PIN NO. AGC 5
3	✱ 40005	DBF05	110	28	40036A	84	INTERNALLY CONNECTED	GEM05	100	26	40017A	90	37	GND	80	52
4	✱ 40006	DBF06	111	25		84		GEM06	101	27	40017A	90		GND	80	
1	✱ 40007	DBF07	112	8		85		GEM07	102	06	40017A	91		GND	81	
2	✱ 40008	DBF08	113	7		85		GEM08	103	09	40017A	91		GND	81	
7	✱ 40009	DBF09	114	68	40034A	86		GEM09	104	66	40017A	92		GND	88	
8	✱ 40010	DBF10	115	65		86		GEM10	105	67	40017A	92		GND	88	
5	✱ 40011	DBF11	116	50		87		GEM11	106	48	40017A	93		GND	89	
6	✱ 40012	DBF12	117	47		87		GEM12	107	49	40017A	93		GND	89	
1	40001	DBF01	110	135	40035A	84		GEM01	100	137	40017A	90	106	GND	80	91
2	40002	DBF02	111	136		84		GEM02	101	134	40017A	90		GND	80	
3	40003	DBF03	112	115		85		GEM03	102	117	40017A	91		GND	81	
4	40004	DBF04	113	118		85		GEM04	103	116	40017A	91		GND	81	
5	40013	DBF13	114	93	40033A	86		GEM13	104	95	40017A	92		GND	88	
6	40014	DBF14	115	96		86		GEM14	105	94	40017A	92		GND	88	
7	40015	DBF15	116	75		87		GEM15	106	77	40017A	93		GND	89	
8	40016	DBF16	117	78		87		GEM16	107	76	40017A	93		GND	89	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED IN TRAY POSITION: TRAY POS B10	CIRCUIT NO. USED IN TRAY POSITION: TRAY POS B11
R1	1006750-43	RESISTOR	3.0K		1/4 W	40001 40002 40003 40004 40013 40014 40015 40016	40005 40006 40007 40008 40009 40010 40011 40012
R2	1006750-32		1K				
R3	1006788-8		20				
	1006750-49		5.1K				
R5	1006788-	SEE CHART					
R30	1006750-15		200				
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
CR5							
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759						
R6	1006750-43	RESISTOR	3.0K		1/4 W	40017	40022
R7	-39		2K				
R8	-28		680				
R9	-39		2K				
R10	-32		1K				
R11	-43		3.0K			40018	40019
R12	-32		1K				
R13	1006788-8		20				
R14	1006750-43		3.0K			40021	40020
R15	-32		1K				
R16	-49		5.1K				
R17	[illegible]		20				
R18	1006788-	SEE CHART					
R19	1006750-32		1K			40023	40025
R20	-49		5.1K				
R21	1006788-8		20				
R22	1006750-32		1K			40024	40026
R23	[illegible]		[illegible]				
R24	1006788-8		20				
R25	1006750-43		3.0K			40027	40028
R26	-32		1K				
R27	-49		5.1K				
R28	1006788-8		20				
R29	1006788-	SEE CHART					
R31	1006750-15		200			40017	40022
R32	-15		200			40018	40019
R33	-15		200			40021	40020
R34	-15		200			40027	40028
R35	-43		3.0K			40029	40030
CR6	1006751	DIODE				40018	40019
CR7							
CR8							
CR9						40021	40020
CR10							
CR11							
CR12							
CR13							

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO USED IN TRAY POSITION: TRAY POS B10	CIRCUIT NO USED IN TRAY POSITION: TRAY POS B11
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
~~CR22~~							
CR23						40029	40030
L1	1010406-11	INDUCTOR	3.9μH			40018	40019
L2	-17		0.33μH			40021	40020
L3	-17		0.33μH			40027	40028
L4	-7		8.2μH			40035	40036
L5	-7					40035	40036
L6	-7					40033	40034
L7	-7					40033	40034
L8	-7					40031	40032
L9	-7					40031	40032
L10	-17		0.33μH			40001-40004 40013-40016	40005-40012
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759						
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759						
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16							
Q17	1006759						
~~C1~~	~~[illegible]~~	CAPACITOR	~~[illegible]~~		~~[illegible]~~	~~40018~~	~~40019~~
C2	1006755-79		6.8μf		35 VDC	40035	40036
C3	1006755-32		12μf		20 VDC	40035	40036
C4	1006755-79		6.8μf		35VDC	40033	40034
C5	1006755-32		12μf		20VDC	40033	40034
C6	1006755-79		6.8μf		35VDC	40031	40032
C7	1006755-32		12μf		20VDC	40031	40032
C8	1006755-79		6.8μf		35 VDC	40029	40030

R5, R18, R29 SEE NOTE 5	
VALUE	PART NO.
1.7	1006788-16
1.75	-17
1.8	-18
1.85	-19
1.9	-20
1.95	-21
2.0	-22
2.05	-23
2.1	-24
2.15	-25
2.2	-26
2.25	-27
2.3	-28
2.5	-29
2.6	-30
2.7	-31
2.8	-32
2.9	-33
3.0	-34
3.1	-35

NOTES

1. INTERPRET DRAWING PER STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE EXPRESSED IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR TRAY POS B11 ARE INDICATED BY AN ASTERISK (✱) OR BY DOTTED BALLOONS
4. — DENOTES AGC 4 PIN NO.
   — DENOTES AGC 5 PIN NO.
5. ✱✱ TO BE SELECTED BY ELECTRICAL TEST

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO
CONTRACT
DRAWN DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-27
APPROVAL 3/27/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL 27 Mar 63

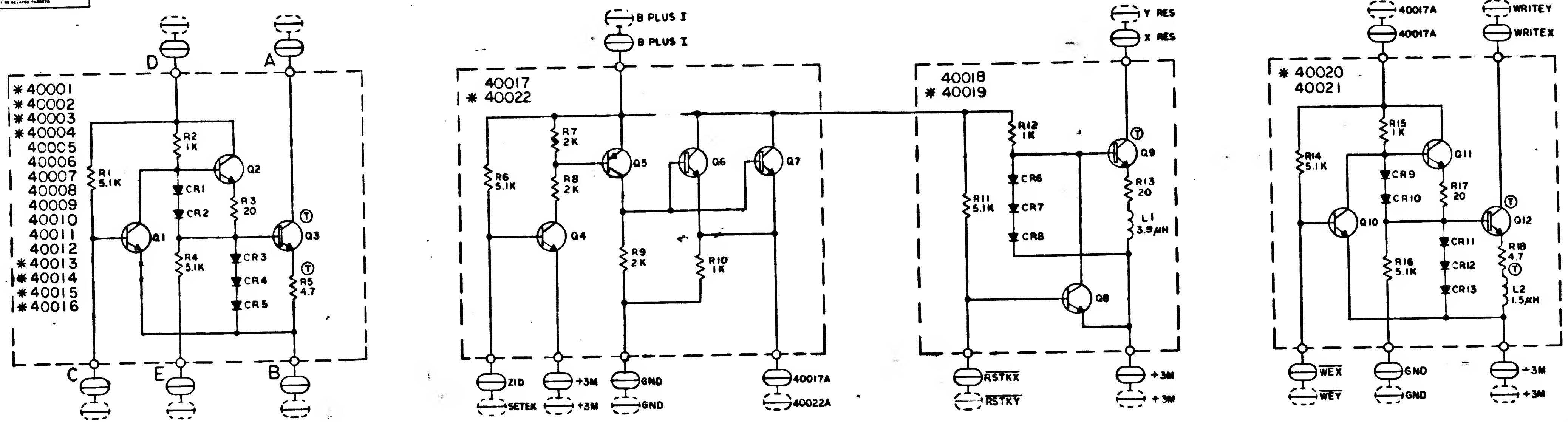
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

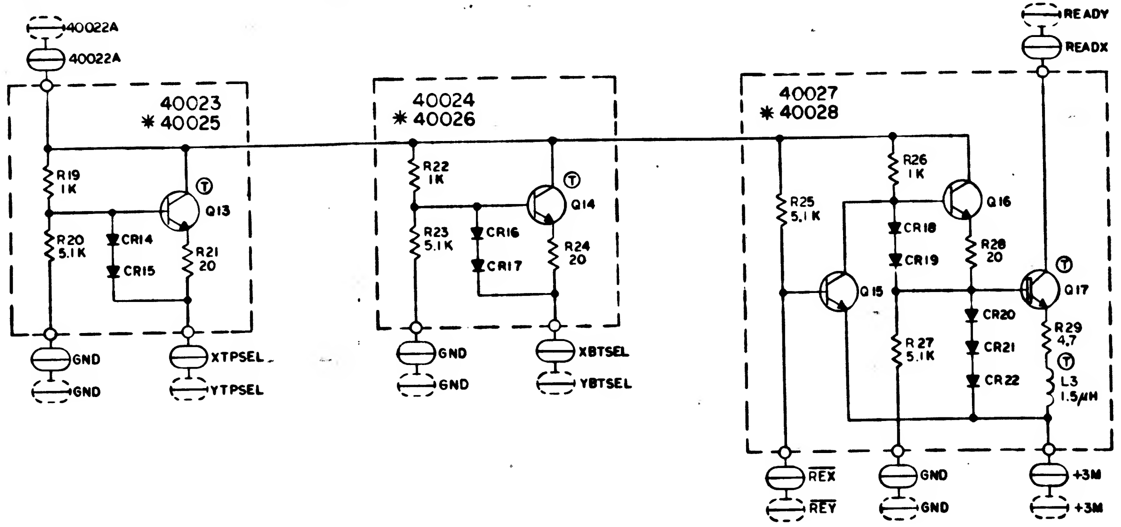
SCHEMATIC,
ERASABLE DRIVERS MODULE
B10 AND B11

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006086
SCALE —
WT —
SHEET 1 OF 1

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL





FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00671 DATE 3-27-63

CIRCUIT NO.	A			B			C			D			E		
	SIGNAL NAME	PIN NO. AGC 5	PIN NO. AGC 4	SIGNAL NAME	PIN NO. AGC 5	PIN NO. AGC 4	SIGNAL NAME	PIN NO. AGC 5	PIN NO. AGC 4	SIGNAL NAME	PIN NO. AGC 5	PIN NO. AGC 4	SIGNAL NAME	PIN NO. AGC 5	PIN NO. AGC 4
40005	DBF05			+3M			GEM05			40017A			GND		
40006	DBF06			+3M			GEM06			40017A			GND		
40007	DBF07			+3M			GEM07			40017A			GND		
40008	DBF08			+3M			GEM08			40017A			GND		
40009	DBF09			+3M			GEM09			40017A			GND		
40010	DBF10			+3M			GEM10			40017A			GND		
40011	DBF11			+3M			GEM11			40017A			GND		
40012	DBF12			+3M			GEM12			40017A			GND		
✱ 40001	DBF01			+3M			GEM01			40017A			GND		
✱ 40002	DBF02			+3M			GEM02			40017A			GND		
✱ 40003	DBF03			+3M			GEM03			40017A			GND		
✱ 40004	DBF04			+3M			GEM04			40017A			GND		
✱ 40013	DBF13			+3M			GEM13			40017A			GND		
✱ 40014	DBF14			+3M			GEM14			40017A			GND		
✱ 40015	DBF15			+3M			GEM15			40017A			GND		
✱ 40016	DBF16			+3M			GEM16			40017A			GND		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. CIRCUIT NUMBERS ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY AN ASTERISK: ✱. SIGNAL NAMES AND PIN NUMBERS ON THE SCHEMATIC FOR STICK NO. 2 ARE INDICATED BY THE DOTTED BALLOONS: ⊖

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
R1	1006750-49	RESISTOR	5.1K		1/4 W	40005 40006 40007 40008 40009 40010 40011 40012	40001 40002 40003 40004 40013 40014 40015 40016
R2	1006750-32		1K				
R3	1010369-148		20				
R4	1006750-49		5.1K				
R5	1006788-01	↓	4.7		↓		
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
CR5	↓	↓					
Q1	1006752	TRANSISTOR					
Q2	1006752						
Q3	1006759	↓					
R6	1006750-49	RESISTOR	5.1K		1/4 W	40017	40022
R7	-39		2K				
R8	-39		2K				
R9	-39		2K				
R10	-32		1K			↓	↓
R11	-49		5.1K			40018	40019
R12	↓ -32		1K				
R13	1010369-148		20			↓	↓
R14	1006750-49		5.1K			40021	40020
R15	-32		1K				
R16	↓ -49		5.1K				
R17	1010369-148		20				
R18	1006788-01		4.7			↓	↓
R19	1006750-32		1K			40023	40025
R20	↓ -49		5.1K				
R21	1010369-148		20			↓	↓
R22	1006750-32		1K			40024	40026
R23	↓ -49		5.1K				
R24	1010369-148		20			↓	↓
R25	1006750-49		5.1K			40027	40028
R26	-32		1K				
R27	↓ -49		5.1K				
R28	1010369-148		20				
R29	1006788-01	↓	4.7		↓	↓	↓
CR6	1006751	DIODE				40018	40019
CR7							
CR8						↓	↓
CR9						40021	40020
CR10							
CR11							
CR12							
CR13	↓	↓				↓	↓

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON	
						STICK NO. 1	STICK NO. 2
CR14	1006751	DIODE				40023	40025
CR15						40023	40025
CR16						40024	40026
CR17						40024	40026
CR18						40027	40028
CR19							
CR20							
CR21							
CR22	↓	↓				↓	↓
L1	1006756-6	INDUCTOR	3.9μH			40018	40019
L2	-4		1.5μH			40021	40020
L3	↓ -4	↓	1.5μH			40027	40028
Q4	1006752	TRANSISTOR				40017	40022
Q5	1006753						
Q6	1006759						
Q7	1006759					↓	↓
Q8	1006752					40018	40019
Q9	1006759					40018	40019
Q10	1006752					40021	40020
Q11	1006752						
Q12	1006759					↓	↓
Q13	1006752					40023	40025
Q14						40024	40026
Q15						40027	40028
Q16	↓						
Q17	1006759	↓				↓	↓

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN Frank R. Walker DATE 3/20/63
CHECKED 3/26/63
APPROVAL Albert Hopkins 3-26
APPROVAL Eldon C Hall 3/22/63
NASA APPROVAL W J Rhine 3-27-63
MIT APPROVAL W Kupfer 27 Mar 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ERASABLE DRIVERS STICK

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006086
SCALE | WT | SHEET 1 OF

MASTER

1006086

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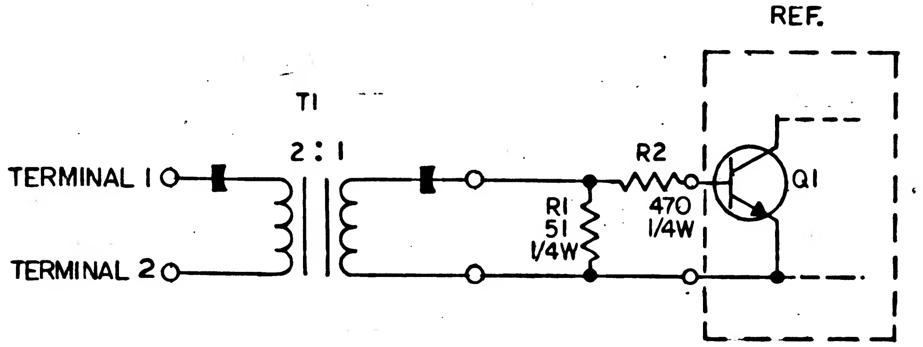
A 1006087 (M)

REVISIONS TDRR 00736

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01745	6/24/63	ECH WL



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-1	RESISTOR	51		1/4
R2	1006750-24	RESISTOR	470		1/4
T1	1006762	TRANSFORMER PULSE			

NOTES:-

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ALL RESISTORS ARE IN OHMS UNLESS OTHERWISE SPECIFIED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
E.G. NO. CONTRACT

DRAWN Louis Alowe DATE 21-3-63
CHECKED
APPROVAL Donald J Bowler 3/22/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL Jack Barnard
MIT APPROVAL W Kupfer [illegible]63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
Y TRANSFORMER
INPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006087
SCALE —
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

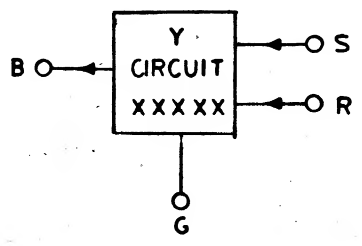
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

B 1006087 M M

REVISIONS TDRR 00736

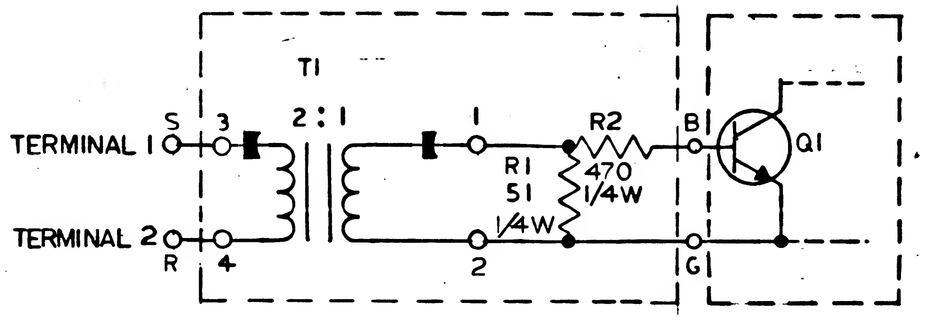
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01745	6/24/63	ECH WK
B	REVISED PER TDRR 02053	7/17/63	RPK

SYMBOL



Y CIRCUIT

REF.



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-1	RESISTOR	51		1/4
R2	1006750-24	RESISTOR	470		1/4
T1	1006762	TRANSFORMER PULSE			

NOTES:-
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ALL RESISTORS ARE IN OHMS UNLESS OTHERWISE SPECIFIED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN Louis Alouve DATE 21-3-63
CHECKED
APPROVAL Donald J Baxter 3/22/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL Jack Barnard
MIT APPROVAL W for 7-9-63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
Y TRANSFORMER
INPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006087
SCALE —
WT
SHEET OF

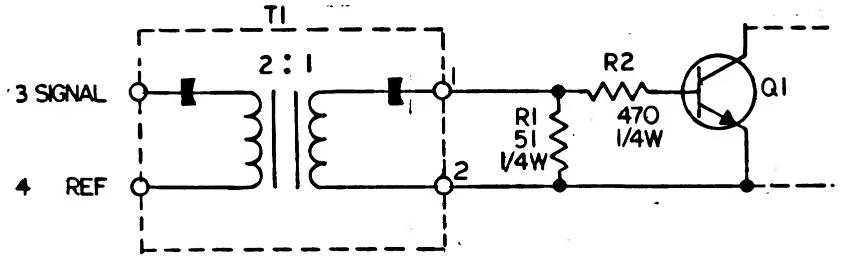
INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006087

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TORR 00736

SYM	DESCRIPTION	DATE	APPROVAL



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-1	RESISTOR	51		1/4
R2	1006750-24	RESISTOR	470		1/4
T1	1006762	TRANSFORMER PULSE			
Q1	1006771	MICRO-NOR GATE			

NOTES:-

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ALL RESISTORS ARE IN OHMS UNLESS OTHERWISE SPECIFIED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN Louis Blowe DATE 21-3-63
CHECKED
APPROVAL Donald J Bowler 3/22/63
APPROVAL Eldon C Hall 4/1/63
NASA APPROVAL Jack Barnard
MIT APPROVAL W. Hoag for 7Apr63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
Y TRANSFORMER
INPUT CIRCUIT

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006087
SCALE —//—
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

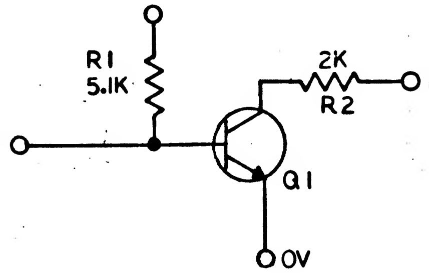
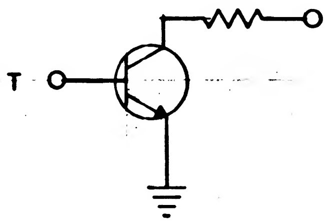
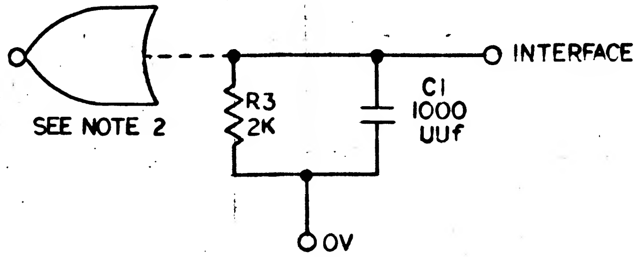
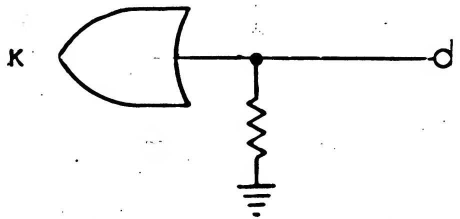
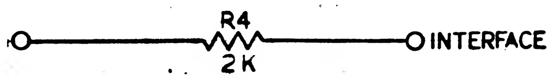
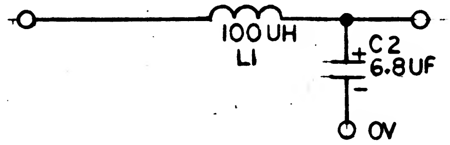
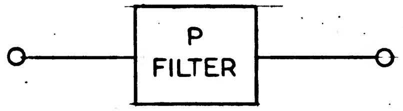
1006087

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

1006088 A

REVISIONS TDRR 01396

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01746	7/24/63	ECH WJL

CIRCUIT TYPE	NAME	SYMBOL
	T NETWORK	
 INTERFACE SEE NOTE 2 R3 2K C1 1000 UUf 0V	K NETWORK	
	R NETWORK (SEE NOTE 2)	
	POWER FILTER	

REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-49	RESISTOR	5.1K	2%	1/4W
R2	-39		2K		
R3	-39		2K		
R4	-39		2K		
C1	1006777-24	CAPACITOR	1000 Pf	10%	50VDC
C2	1006755-79		6.8uf	10%	35DC
L1	1010406-6	INDUCTANCE	100uH	10%	325mA
Q1	1006752	TRANSISTOR	—	—	—

NOTES:-

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. NOT IN INTERFACE MODULE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN Louis S Alcook DATE MAY 22-63
CHECKED
APPROVAL Donald A Bowler 5/28/63
APPROVAL Eldon C Hall 28May63
NASA APPROVAL
MIT APPROVAL 29 May 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INTERFACE CIRUITS

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006088
SCALE
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

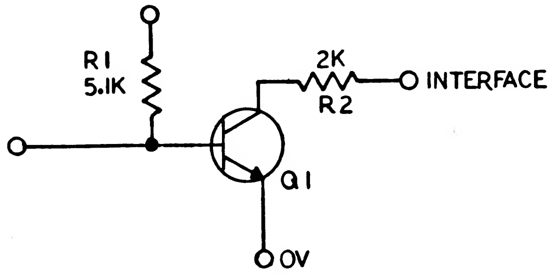
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

8809001

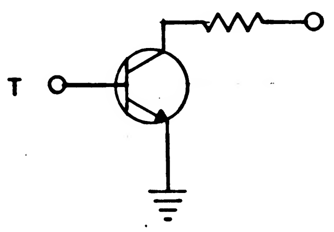
SYM	DESCRIPTION	DATE	APPROVAL

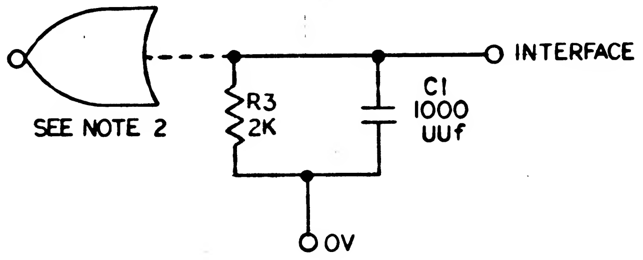
REVISIONS TDRR 01396

CIRCUIT TYPE | **NAME** | **SYMBOL**

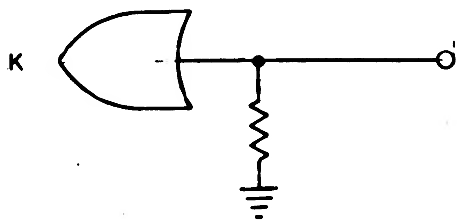


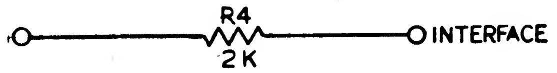
T NETWORK



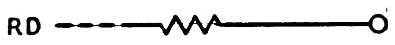


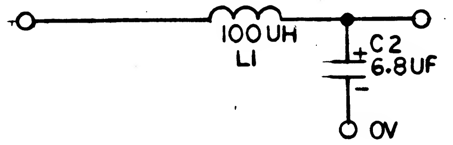
K NETWORK



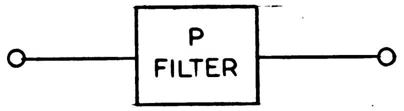


R NETWORK





POWER FILTER



REF DES	PART NO	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-49	RESISTOR	5.1K	2%	1/4W
R2	↓ -39	↓	2K	↓	↓
R3	-39		2K		
R4	-39		2K		
C1	1006777-24	CAPACITOR	1000 Pf	10%	50VDC
C2	1006755-79	↓	6.8uf	10%	35DC
L1	1010406 -6	INDUCTANCE	100uH	10%	325mA
Q1	1006752	TRANSISTOR	—	—	—

NOTES:–

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. NOT IN INTERFACE MODULE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL //
HEAT TREATMENT //
FINAL FINISH //

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN Louis S Alcock DATE May 22-63
CHECKED
APPROVAL Donald A Bowler 5/28/63
APPROVAL Eldon C Hall [illegible]
NASA APPROVAL Jack Barnard
MIT APPROVAL W Koppler 29 May 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INTERFACE MODULE CIRCUITS

CODE IDENT NO.
SIZE C
NASA DRAWING NO. 1006088
SCALE
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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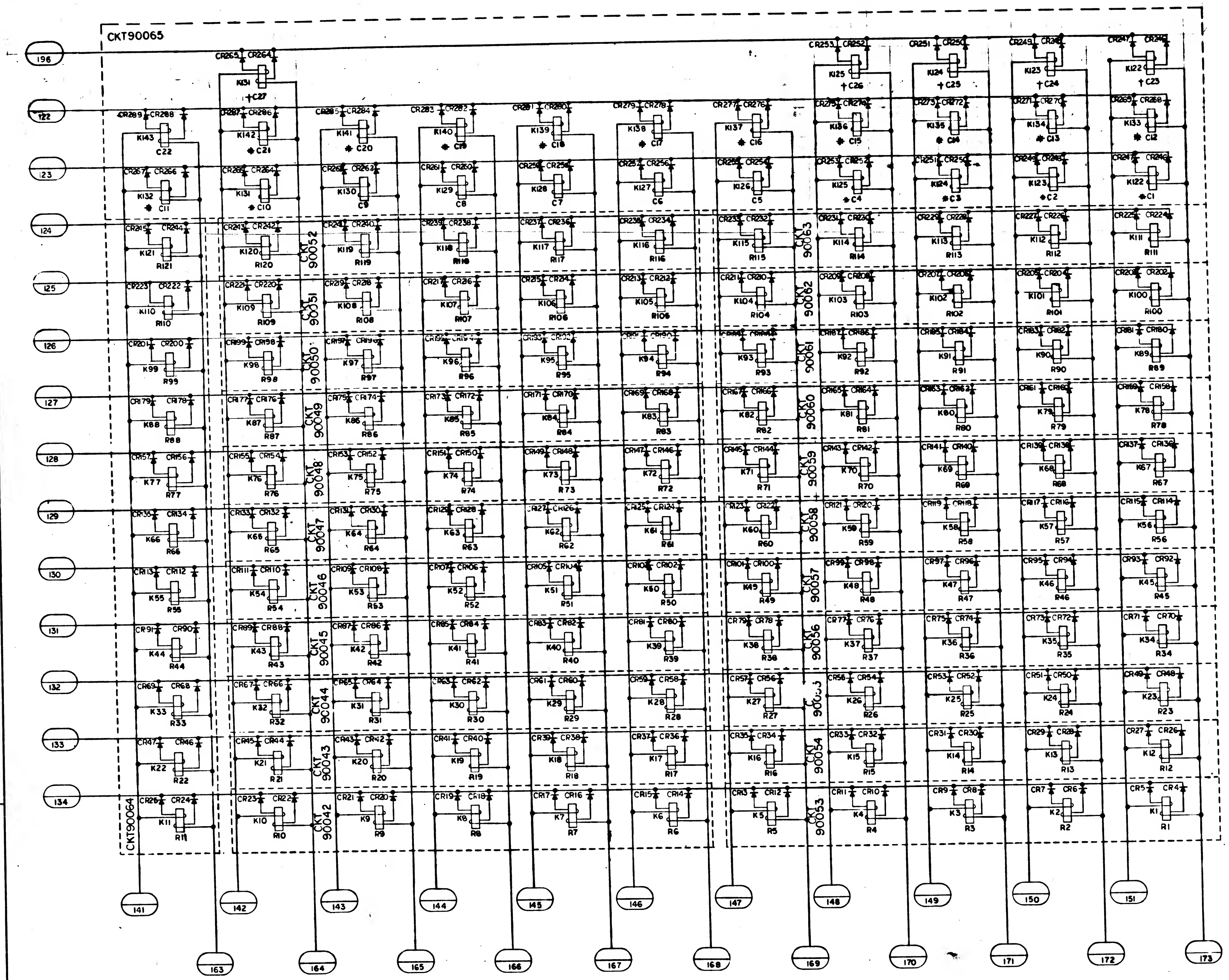
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. * NOT USED ON MAIN PANEL
3. † NOT USED ON NAV PANEL

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00826 DATE 10 Apr 63

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL —//—
HEAT TREATMENT —//—
FINAL FINISH —//—

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN J. Gundy DATE 4-4-63
CHECKED
APPROVAL Ramon Alonso 10 Apr 63
APPROVAL Eldon C. Hall 10 Apr 63
NASA APPROVAL
MIT APPROVAL 10 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC SCHEMATIC DISPLAY
NAV & MAIN PANEL

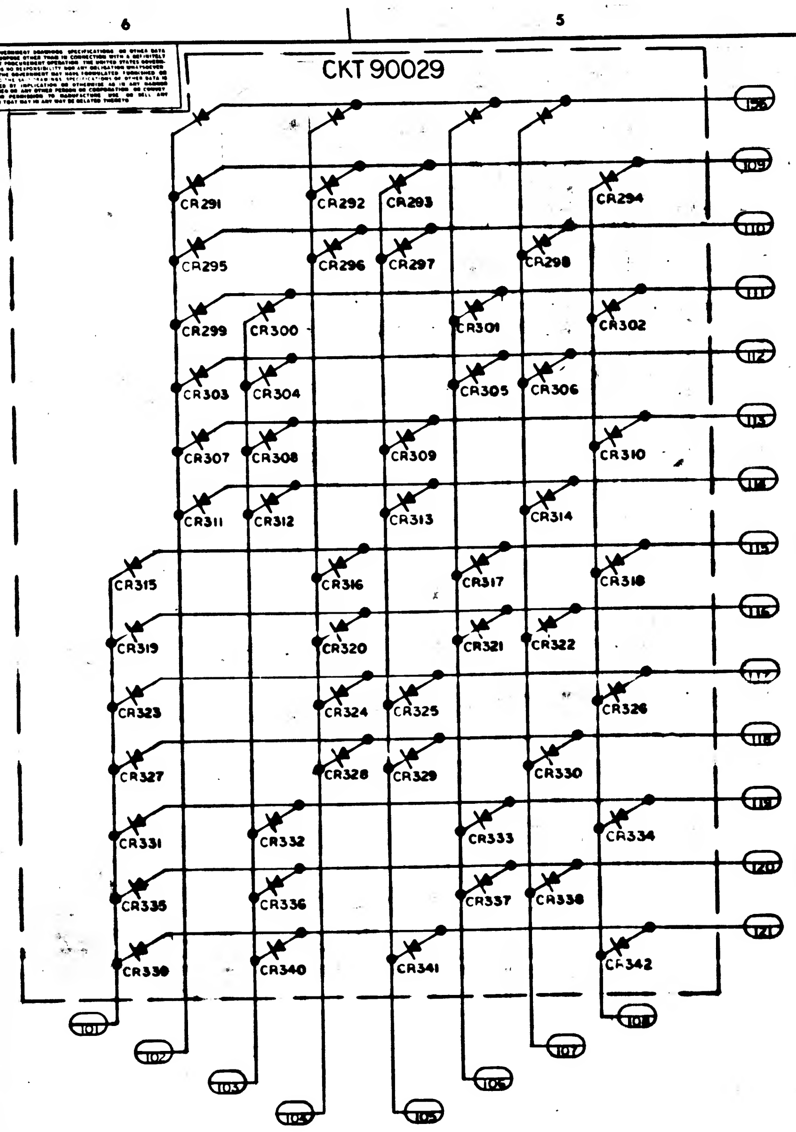
CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006089
SCALE
WT
SHEET 1 OF 2

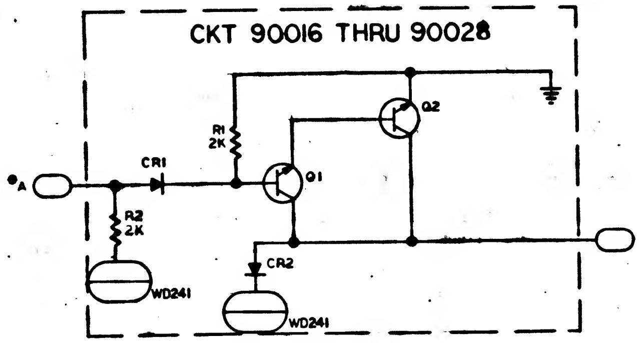
MASTER

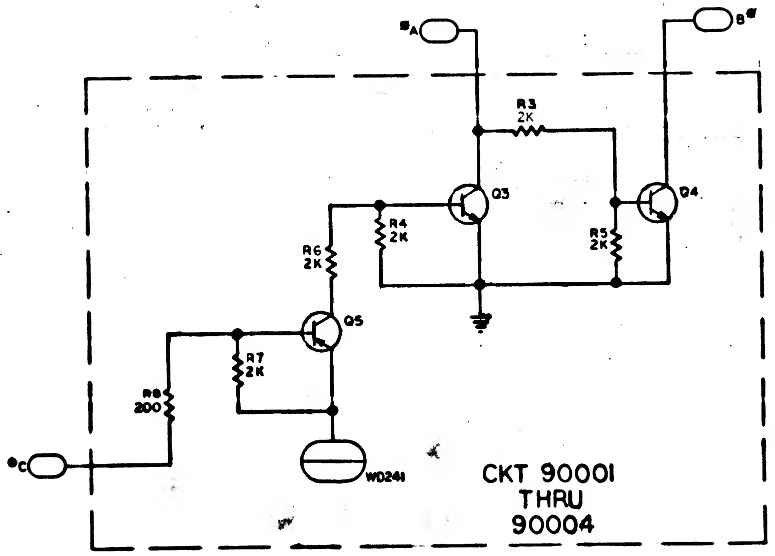
1006089

INCHES
PHOTOGRAPHIC SCALE ONLY

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



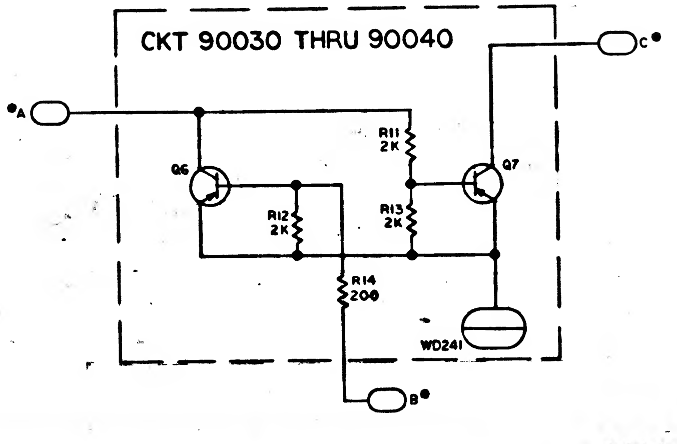




REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R1	1006750-39	RESISTOR	2K		1/4 W
R2			2K		
R3			2K		
R4			2K		
R5			2K		
R6			2K		
R7			2K		
R8	1006750-15		200		
R9	1006750-15		200		
R10	1006750-39		2K		
R11			2K		
R12			2K		
R13			2K		
R14	1006750-15		200		
		TRANSISTOR			
Q1	1006752				
Q2	1006759				
Q3	1006752				
Q4	1006752				
Q5	1006753				
Q6	1006753				
Q7	1006753				
K1-K143	1006772-1	RELAY			
CR1	1006751	DIODE			
CR2					
CR3					
CR4-290					
CR291-342					

CKT NO.	A	B	C SIGNAL	
90001	101	102	135	PE 225
90002	103	104	136	PE 226
90003	105	106	137	PE 227
90004	107	108	138	PE 228
90016	109	122		
90017	110	123		
90018	111	124		
90019	112	125		
90020	113	126		
90021	114	127		
90022	115	128		
90023	116	129		
90024	117	130		
90025	118	131		
90026	119	132		
90027	120	133		
90028	121	134		
90030	141	152	163	PE 214
90031	142	153	164	PE 215
90032	143	154	165	PE 216
90033	144	155	166	PE 217
90034	145	156	167	PE 218
90035	146	157	168	PE 219
90036	147	158	169	PE 220
90037	148	159	170	PE 221
90038	149	160	171	PE 222
90039	150	161	172	PE 223
90040	151	162	173	PE 224

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE IN OHMS
3. ⊛SEE CHART



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00826 DATE 10Apr63

E 1006089

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE 1 April 63
CHECKED
APPROVAL 11 Apr 63
APPROVAL Eldon C. Hall 9 April 63
NASA APPROVAL 4/11/63
MIT APPROVAL 10 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

AGC SCHEMATIC DISPLAY
NAV&MAIN PANEL

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006089
SCALE — WT SHEET 2 OF 2

INCHES
PHOTOGRAPHIC SCALE ONLY

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REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	6-12-63	RKB

IN BITS

IN BIT	NAME	INTERFACE SIGNAL
IN0-1	KEY CODE 1 (KEYRUPT)	KE201
IN0-2	KEY CODE 2 (KEYRUPT)	KE202
IN0-3	KEY CODE 3 (KEYRUPT)	KE203
IN0-4	KEY CODE 4 (KEYRUPT)	KE204
IN0-5	KEY CODE 5 (KEYRUPT)	KE205
IN0-6	BLOCK UPLNK	S0246
IN0-7	INHIBIT UPSYNC	
IN0-8	ALARM	
IN0-9	ALARM	
IN0-10	ALARM	
IN0-11	LRL	YE037 NC
IN0-12	LRH	YE038 NC
IN0-13	LANHLO	YE036 NC
IN0-14	RENRLO	YE035 NC
IN0-15	MARK (KEYRUPT)	KE102
IN1	COUNTER(24 HR)	
IN2-1	1600PPS	
IN2-2	800PPS	
IN2-3	400PPS	
IN2-4	200PPS	
IN2-5	SPARE	
IN2-6	REND. RADAR FAIL	YE040 NC
IN2-7	THRUST RPT 2	YE004 NC
IN2-8	LANDING RADAR FAIL RPT 2	YE039 NC
IN2-9	OPT FAIL RPT 2	YE112 NC
IN2-10	CDU FAIL RPT 2	YE124
IN2-11	PIPA FAIL RPT 2	YE138
IN2-12	IMU FAIL RPT 2	YE141
IN2-13	ABORT RPT 2	YE006 NC
IN2-14	G & N CONTROL RPT 2	YE005 NC
IN2-15	ENGINE ENABLE RPT 2	YE007 NC
IN3-1	K1	KE158
IN3-2	K2	KE159
IN3-3	K3	KE160
IN3-4	K4	KE161
IN7-5	K5	KE162
IN3-6	TRN SW	KE164
IN3-7	K6	KE163
IN3-8	SPARE	KE113 NC
IN3-9	SPARE	
IN3-10	OR OF C1-C27	KE210
IN3-11	RADAR POWER ON	YE033 NC
IN3-12	ZERO OPT	KE104
IN3-13	SEXTANT ON	KE105
IN3-14	OPT MODE SW2	KE106 NC
IN3-15	OPT MODE SW3	KE107 NC

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL
OUT0-1	RLYBIT 1	TE214
OUT0-2	RLYBIT 2	TE215
OUT0-3	RLYBIT 3	TE216
OUT0-4	RLYBIT 4	TE217
OUT0-5	RLYBIT 5	TE218
OUT0-6	RLYBIT 6	TE219
OUT0-7	RLYBIT 7	TE220
OUT0-8	RLYBIT 8	TE221
OUT0-9	RLYBIT 9	TE222
OUT0-10	RLYBIT 10	TE223
OUT0-11	RLYBIT 11	TE224
OUT0-12	RLYWD 1	TE225
OUT0-13	RLYWD 2	TE226
OUT0-14	RLYWD 3	TE227
OUT0-15	RLYWD 4	TE228
OUT1-1	SPARE	
OUT1-2	ALARM 1	T-229
OUT1-3	ALARM 2	T-230
OUT1-4	ALARM 3	T-231
OUT1-5	ALARM 4	T-232
OUT1-6	BLOCK UPLNK	
OUT1-7	RUPT TRAP RESET (RUPT 2)	
OUT1-8	SPARE	
OUT1-9	ID WORD	
OUT1-10	BLOCK ENDPULSE	
OUT1-11	SPARE	
OUT1-12	SPARE	
OUT1-13	ENGINE ON	
OUT1-14	ENGINE SEQUENCE START	
OUT1-15	ENGINE STOP	

OUT2-1	RADAR C	OUTCR 3
OUT2-2	RADAR B	
OUT2-3	RADAR A	
OUT2-4	THRUST	OUTCR 2
OUT2-5	OPT Y	
OUT2-6	OPT X	
OUT2-7	+	
OUT2-8	-	
OUT2-9	Z	OUTCR 1
OUT2-10	Y	
OUT2-11	X	
OUT2-12	GYRO	
OUT2-13	CDU	
OUT2-14	+	
OUT2-15	-	

OUT3 SPARE(INPUT OR OUTPUT)

OUT4-1 OUT4-2 : : : : : : OUT4-16	16 BITS FOR DOWN LNK DATA

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
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DWG. NO. CONTRACT
DRAWN ______ DATE ______
CHECKED ______
APPROVAL Donald J. Bowler 1/24/63
APPROVAL Eldon C. Hall
NASA APPROVAL 1/24/63
MIT APPROVAL 24Jan63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006095
SCALE | WT | SHEET OF

1006095

INCHES 0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	6-12-63	DJB RKB
B	REVISED PER TDRR 04171	10-28-63	WR.

IN BITS

IN BIT	NAME	INTERFACE SIGNAL
IN0-1	KEY CODE 1 (KEYRUPT)	KE201
IN0-2	KEY CODE 2 (KEYRUPT)	KE202
IN0-3	KEY CODE 3 (KEYRUPT)	KE203
IN0-4	KEY CODE 4 (KEYRUPT)	KE204
IN0-5	KEY CODE 5 (KEYRUPT)	KE205
IN0-6	BLOCK UPLNK	SD246
IN0-7	INHIBIT UPSYNC	
IN0-8	ALARM	
IN0-9	ALARM	
IN0-10	ALARM	
IN0-11	LRL	YE037 NC
IN0-12	LRM	YE038 NC
IN0-13	LANRLO	YE036 NC
IN0-14	RFNRLO	YE035 NC
IN0-15	MARK (KEYRUPT)	KE102
IN1	COUNTER(24 HR)	
IN2-1	1600PPS	
IN2-2	800PPS	
IN2-3	400PPS	
IN2-4	200PPS	
IN2-5	SPARE	
IN2-6	REND. RADAR FAIL	YE040 NC
IN2-7	THRUST RPT 2	YE004 NC
IN2-8	LANDING RADAR FAIL RPT 2	YE039 NC
IN2-9	OPT FAIL RPT 2	YE112 NC
IN2-10	CDU FAIL RPT 2	YE124
IN2-11	PIPA FAIL RPT 2	YE138
IN2-12	IMU FAIL RPT 2	YE141
IN2-13	ABORT RPT 2	YE006 NC
IN2-14	G & N CONTROL RPT 2	YE005 NC
IN2-15	ENGINE ENABLE RPT 2	YE007 NC
IN3-1	K1	KE158
IN3-2	K2	KE159
IN3-3	K3	KE160
IN3-4	K4	KE161
IN7-5	K5	KE162
IN3-6	TRN SW	KE164
IN3-7	K6	KE163
IN3-8	SPARE	[illegible]
IN3-9	SPARE	
IN3-10	OR OF C1-C33	KE210
IN3-11	RADAR POWER ON	YE033 NC
IN3-12	ZERO OPT	KE104
IN3-13	SEXTANT ON	KE105
IN3-14	OPT MODE SW2	KE106 NC
IN3-15	OPT MODE SW3	KE107 NC

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL
OUT0-1	RLYBIT 1	TE214
OUT0-2	RLYBIT 2	TE215
OUT0-3	RLYBIT 3	TE216
OUT0-4	RLYBIT 4	TE217
OUT0-5	RLYBIT 5	TE218
OUT0-6	RLYBIT 6	TE219
OUT0-7	RLYBIT 7	TE220
OUT0-8	RLYBIT 8	TE221
OUT0-9	RLYBIT 9	TE222
OUT0-10	RLYBIT 10	TE223
OUT0-11	RLYBIT 11	TE224
OUT0-12	RLYWD 1	TE225
OUT0-13	RLYWD 2	TE226
OUT0-14	RLYWD 3	TE227
OUT0-15	RLYWD 4	TE228
OUT1-1	PROGRAM ALARM	T-229
OUT1-2	COMP. ACTIVITY	T-230
OUT1-3	KEY RLSE	T-236
OUT1-4	TEL. ALARM	T-231
OUT1-5	PRGM CHECK FAIL	T-232
OUT1-6	SPARE	
OUT1-7	RUPT TRAP RESET (RUPT 2)	
OUT1-8	SPARE	
OUT1-9	ID WORD	
OUT1-10	BLOCK ENDPULSE	
OUT1-11	SPARE	
OUT1-12	SPARE	
OUT1-13	ENGINE ON	
OUT1-14	ENGINE SEQUENCE START	
OUT1-15	ENGINE STOP	

OUT2-1	RADAR C	OUTCR 3
OUT2-2	RADAR B	
OUT2-3	RADAR A	
OUT2-4	THRUST	OUTCR 2
OUT2-5	OPT Y	
OUT2-6	OPT X	
OUT2-7	+	
OUT2-8	-	
OUT2-9	Z	OUTCR 1
OUT2-10	Y	
OUT2-11	X	
OUT2-12	GYRO	
OUT2-13	CDU	
OUT2-14	+	
OUT2-15	-	

OUT3 SPARE(INPUT OR OUTPUT)

OUT4-1
OUT4-2
: :
: :
: :
OUT4-16

16 BITS FOR DOWN LNK DATA

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE ED
DIMENSIONS ARE IN S
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APPROVAL Eldon C. Hall
NASA APPROVAL 1/24/63
MIT APPROVAL 24 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006095
SCALE
WT
SHEET OF

1006095 B

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	6-12-63	DJB
B	REVISED PER TDRR 04171	10-24-63	WR.
C	REVISED PER TDRR 04916	12-4-63	

IN BITS

IN BIT	NAME	INTERFACE SIGNAL
IN0-1	KEY CODE 1 (KEYRUPT)	KE201
IN0-2	KEY CODE 2 (KEYRUPT)	KE202
IN0-3	KEY CODE 3 (KEYRUPT)	KE203
IN0-4	KEY CODE 4 (KEYRUPT)	KE204
IN0-5	KEY CODE 5 (KEYRUPT)	KE205
IN0-6	BLOCK UPLNK	SD246
IN0-7	INHIBIT UPSYNC	
IN0-8	ALARM	
IN0-9	ALARM	
IN0-10	ALARM	
IN0-11	LRL	YE037 NC
IN0-12	LRH	YE038 NC
IN0-13	LANRLO	YE036 NC
IN0-14	RENRLO	YE035 NC
IN0-15	MARK (KEYRUPT)	KE102
IN1	COUNTER(24 HR)	
IN2-1	1600PPS	
IN2-2	800PPS	
IN2-3	400PPS	
IN2-4	200PPS	
IN2-5	SPARE	
IN2-6	REND. RADAR FAIL	YE040 NC
IN2-7	THRUST RPT 2	YE004 NC
IN2-8	LANDING RADAR FAIL RPT 2	YE039 NC
IN2-9	OPT FAIL RPT 2	YE112 NC
IN2-10	CDU FAIL RPT 2	YE124
IN2-11	PIPA FAIL RPT 2	YE138
IN2-12	IMU FAIL RPT 2	YE141
IN2-13	ABORT RPT 2	YE006 NC
IN2-14	G & N CONTROL RPT 2	YE005 NC
IN2-15	ENGINE ENABLE RPT 2	YE007 NC
IN3-1	K1	KE158
IN3-2	K2	KE159
IN3-3	K3	KE160
IN3-4	K4	KE161
IN7-5	K12	KE162
IN3-6	TRN SW	KE164
IN3-7	K	KE163
IN3-8	SPARE	
IN3-9	SPARE	
IN3-10	OR OF C1-C33	KE210
IN3-11	RADAR POWER ON	YE033 NC
IN3-12	ZERO OPT	KE104
IN3-13	SEXTANT ON	KE105
IN3-14	OPT MODE SW2	KE106 NC
IN3-15	OPT MODE SW3	KE107 NC

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL
OUT0-1	RLYBIT 1	TE214
OUT0-2	RLYBIT 2	TE215
OUT0-3	RLYBIT 3	TE216
OUT0-4	RLYBIT 4	TE217
OUT0-5	RLYBIT 5	TE218
OUT0-6	RLYBIT 6	TE219
OUT0-7	RLYBIT 7	TE220
OUT0-8	RLYBIT 8	TE221
OUT0-9	RLYBIT 9	TE222
OUT0-10	RLYBIT 10	TE223
OUT0-11	RLYBIT 11	TE224
OUT0-12	RLYWD 1	TE225
OUT0-13	RLYWD 2	TE226
OUT0-14	RLYWD 3	TE227
OUT0-15	RLYWD 4	TE228
OUT1-1	PROGRAM ALARM	T-229
OUT1-2	COMP. ACTIVITY	T-230
OUT1-3	KEY RLSE	T-236
OUT1-4	TEL. ALARM	T-231
OUT1-5	PRGM CHECK FAIL	T-232
OUT1-6	SPARE	
OUT1-7	RUPT TRAP RESET (RUPT 2)	
OUT1-8	SPARE	
OUT1-9	IO WORD	
OUT1-10	BLOCK ENDPULSE	
OUT1-11	SPARE	
OUT1-12	SPARE	
OUT1-13	ENGINE ON	
OUT1-14	ENGINE SEQUENCE START	
OUT1-15	ENGINE STOP	

OUT BIT	NAME	
OUT2-1	RADAR C	OUTCR 3
OUT2-2	RADAR B	
OUT2-3	RADAR A	
OUT2-4	THRUST	OUTCR 2
OUT2-5	OPT Y	
OUT2-6	OPT X	
OUT2-7	+	
OUT2-8	-	
OUT2-9	Z	OUTCR 1
OUT2-10	Y	
OUT2-11	X	
OUT2-12	GYRO	
OUT2-13	CDU	
OUT2-14	+	
OUT2-15	-	

OUT3 SPARE(INPUT OR OUTPUT)

OUT4-1
OUT4-2
: :
: :
: :
OUT4-16

16 BITS FOR DOWN LNK DATA

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
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NASA APPROVAL 1/24/63
MIT APPROVAL 24 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006095
SCALE
WT
SHEET OF

1006095 C

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	[illegible]	DBB RKB
B	REVISED PER TDRR 04171	[illegible]	[illegible]
C	REVISED PER TDRR 049[illegible]	[illegible]	[illegible]
D	REVISED PER TDRR 05750	14 JAN 64	RPK [illegible]

IN BITS

IN BIT	NAME	INTERFACE SIGNAL
IN0-1	KEY CODE 1 (KEYRUPT)	KE201
IN0-2	KEY CODE 2 (KEYRUPT)	KE202
IN0-3	KEY CODE 3 (KEYRUPT)	KE203
IN0-4	KEY CODE 4 (KEYRUPT)	KE204
IN0-5	KEY CODE 5 (KEYRUPT)	KE205
IN0-6	BLOCK UPLNK	SD246
IN0-7	INHIBIT UPSYNC	
IN0-8	CNMRK	KE182 NC
IN0-9	SPARE	
IN0-10	SPARE	
IN0-11	LRL	YE037 NC
IN0-12	LRH	YE038 NC
IN0-13	LANRLO	YE036 NC
IN0-14	RENRLO	YE035 NC
IN0-15	MARK (KEYRUPT)	KE102
IN1	COUNTER(24 HR)	
IN2-1	1600PPS	
IN2-2	800PPS	
IN2-3	400PPS	
IN2-4	200PPS	
IN2-5	ENGINE ENABLE RPT2	YE007 NC
IN2-6	RFND. RADAR FAIL	YE040 NC
IN2-7	THRUST RPT 2	YE004 NC
IN2-8	LANDING RADAR FAIL RPT 2	YE039 NC
IN2-9	OPT FAIL RPT 2	YE112 NC
IN2-10	CDU FAIL RPT 2	YE124
IN2-11	PIPA FAIL RPT 2	YE138
IN2-12	IMU FAIL RPT 2	YE141
IN2-13	ABORT RPT 2	YE006 NC
IN2-14	G & N CONTROL RPT 2	YE005 NC
IN2-15	PARITY RPT2	[illegible]
IN3-1	K1	KE158
IN3-2	K2	KE159
IN3-3	K3	KE160
IN3-4	K4	KE161
IN7-5	K12	KE162
IN3-6	TRN SW	KE164
IN3-7	K5	KE163
IN3-8	SPARE	
IN3-9	SPARE	
IN3-10	OR OF C1-C33	KE210
IN3-11	RADAR POWER ON	YE033 NC
IN3-12	ZERO OPT	KE104
IN3-13	SEXTANT ON	KE105
IN3-14	OPT MODE SW2	KE106 NC
IN3-15	OPT MODE SW3	KE107 NC

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL
OUT0-1	RLYBIT 1	TE214
OUT0-2	RLYBIT 2	TE215
OUT0-3	RLYBIT 3	TE216
OUT0-4	RLYBIT 4	TE217
OUT0-5	RLYBIT 5	TE218
OUT0-6	RLYBIT 6	TE219
OUT0-7	RLYBIT 7	TE220
OUT0-8	RLYBIT 8	TE221
OUT0-9	RLYBIT 9	TE222
OUT0-10	RLYBIT 10	TE223
OUT0-11	RLYBIT 11	TE224
OUT0-12	RLYWD 1	TE225
OUT0-13	RLYWD 2	TE226
OUT0-14	RLYWD 3	TE227
OUT0-15	RLYWD 4	TE228
OUT1-1	PROGRAM ALARM	T-229
OUT1-2	COMP. ACTIVITY	T-230
OUT1-3	KEY RLSE	T-236
OUT1-4	TEL. ALARM	T-231
OUT1-5	PRGM CHECK FAIL	T-232
OUT1-6	SPARE	
OUT1-7	RUPT TRAP RESET (RUPT 2)	
OUT1-8	SPARE	
OUT1-9	ID WORD	
OUT1-10	BLOCK ENDPULSE	
OUT1-11	SPARE	
OUT1-12	SPARE	
OUT1-13	ENGINE ON	
OUT1-14	ENGINE SEQUENCE START	
OUT1-15	ENGINE STOP	

OUT2-1	RADAR C	OUTCR 3
OUT2-2	RADAR B	
OUT2-3	RADAR A	
OUT2-4	THRUST	OUTCR 2
OUT2-5	OPT Y	
OUT2-6	OPT X	
OUT2-7	+	
OUT2-8	-	
OUT2-9	Z	OUTCR 1
OUT2-10	Y	
OUT2-11	X	
OUT2-12	GYRO	
OUT2-13	CDU	
OUT2-14	+	
OUT2-15	-	

OUT3 SPARE(INPUT OR OUTPUT)

OUT4-1 OUT4-2 : : : : : : OUT4-16	16 BITS FOR DOWN LNK DATA

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN ____ DATE ____
CHECKED ____
APPROVAL Donald J Bowles
APPROVAL Eldon C Hall
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 24 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO. SIZE D NASA DRAWING NO. 1006095
SCALE WT SHEET OF

1006095 D

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	[illegible]	RHB
B	REVISED PER TDRR 04171	[illegible]	[illegible]
C	REVISED PER TDRR 04916	[illegible]	[illegible]
D	REVISED PER TDRR 05750	Jan 64	RPL
E	REVISED PER TDRR 06234	3/11/64	[illegible]

IN BITS

IN BIT	NAME	INTERFACE SIGNAL	
IN0-1	KEY CODE 1 (KEYRUPT)	KE201	
IN0-2	KEY CODE 2 (KEYRUPT)	KE202	
IN0-3	KEY CODE 3 (KEYRUPT)	KE203	
IN0-4	KEY CODE 4 (KEYRUPT)	KE204	
IN0-5	KEY CODE 5 (KEYRUPT)	KE205	
IN0-6	BLOCK UPLNK	SD246	
IN0-7	INHIBIT UPSYNC		
IN0-8	SPARE		
IN0-9	SPARE		
IN0-10	SPARE		
IN0-11	SPARE	YE037 NC	SEE NOTE 1
IN0-12	SPARE	YE038 NC	
IN0-13	SPARE	YE036 NC	
IN0-14	SPARE	YE035 NC	
IN0-15	MARK (KEYRUPT)	KE102	
IN1	COUNTER(24 HR)		
IN2-1	1600PPS		
IN2-2	800PPS		
IN2-3	400PPS		
IN2-4	200PPS		
IN2-5	SPARE	YE007 NC	SEE NOTE 1
IN2-6	SPARE RPT2	YE040 NC	
IN2-7	SPARE RPT2	YE004 NC	
IN2-8	SPARE RPT2	YE039 NC	
IN2-9	SPARE RPT2	YE112 NC	
IN2-10	CDU FAIL	YE124	
IN2-11	PIPA FAIL	YE138	
IN2-12	IMU FAIL	YE141	
IN2-13	SPARE	YE006 NC	SEE NOTE 1
IN2-14	SPARE	YE005 NC	
IN2-15	PARITY [illegible]		
IN3-1	K1	KE158	
IN3-2	K2	KE159	
IN3-3	K3	KE160	
IN3-4	K4	KE161	
IN7-5	K12	KE162	
IN3-6	TRN SW	KE164	
IN3-7	K5	KE163	
IN3-8	SPARE		
IN3-9	SPARE		
IN3-10	OR OF C1-C33	KE210	
IN3-11	STAR PRES	YE183	
IN3-12	ZERO OPT	KE104	
IN3-13	SEXTANT ON	KE105	
IN3-14	OPT MODE SW2	KE106	
IN3-15	OPT MODE SW3	KE107	

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL	
OUT0-1	RLYBIT 1	TE214	
OUT0-2	RLYBIT 2	TE215	
OUT0-3	RLYBIT 3	TE216	
OUT0-4	RLYBIT 4	TE217	
OUT0-5	RLYBIT 5	TE218	
OUT0-6	RLYBIT 6	TE219	
OUT0-7	RLYBIT 7	TE220	
OUT0-8	RLYBIT 8	TE221	
OUT0-9	RLYBIT 9	TE222	
OUT0-10	RLYBIT 10	TE223	
OUT0-11	RLYBIT 11	TE224	
OUT0-12	RLYWD 1	TE225	
OUT0-13	RLYWD 2	TE226	
OUT0-14	RLYWD 3	TE227	
OUT0-15	RLYWD 4	TE228	
OUT1-1	PROGRAM ALARM	T-229	
OUT1-2	COMP. ACTIVITY	T-230	
OUT1-3	KEY RLSE	T-236	
OUT1-4	TEL. ALARM	T-231	
OUT1-5	PRGM CHECK FAIL	T-232	
OUT1-6	SPARE		
OUT1-7	RUPT TRAP RESET (RUPT 2)		
OUT1-8	SPARE		
OUT1-9	ID WORD		
OUT1-10	BLOCK ENDPULSE		
OUT1-11	SPARE		
OUT1-12	SPARE		
OUT1-13	ENGINE ON	XB011	
OUT1-14	SPARE	XB013 NC	SEE NOTE 1
OUT1-15	SPARE	XB012 NC	
OUT2-1	RADAR C		OUTCR 3
OUT2-2	RADAR B		
OUT2-3	RADAR A		
OUT2-4	THRUST		OUTCR 2
OUT2-5	OPT Y		
OUT2-6	OPT X		
OUT2-7	+		
OUT2-8	-		
OUT2-9	Z		OUTCR 1
OUT2-10	Y		
OUT2-11	X		
OUT2-12	GYRO		
OUT2-13	CDU		
OUT2-14	+		
OUT2-15	-		
OUT3	SPARE(INPUT OR OUTPUT)		
OUT4-1 OUT4-2 : : : : : : OUT4-16			16 BITS FOR DOWN LNK DATA

NOTE: 1.

1. NC SIGNIFIES THAT THE SIGNALS ARE NOT WIRED THROUGH TRAY C TO CONNECTORS 05A3J1 AND 05A3P1

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN ______ DATE ______
CHECKED ______
APPROVAL Donald J. Bowles
APPROVAL Eldon C. Hall
NASA APPROVAL 1/14/63
MIT APPROVAL 24 Jan 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006095
SCALE
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01578	[illegible]	[illegible]
B	REVISED PER TDRR 04191	[illegible]	[illegible]
C	REVISED PER TDRR 049[illegible]	[illegible]	[illegible]
D	REVISED PER TDRR 05750	Jan 64	[illegible]
E	REVISED PER TDRR 06234	3/11/64	[illegible]
F	REVISED PER TDRR 06958	3/19/64	[illegible]

IN BITS

IN BIT	NAME	INTERFACE SIGNAL	
IN0-1	KEY CODE 1 (KEYRUPT)	KE201	
IN0-2	KEY CODE 2 (KEYRUPT)	KE202	
IN0-3	KEY CODE 3 (KEYRUPT)	KE203	
IN0-4	KEY CODE 4 (KEYRUPT)	KE204	
IN0-5	KEY CODE 5 (KEYRUPT)	KE205	
IN0-6	BLOCK UPLNK	SD246	
IN0-7	INHIBIT UPSYNC		
IN0-8	SPARE		
IN0-9	SPARE		
IN0-10	SPARE		
IN0-11	SPARE	YE037 NC	SEE NOTE 1
IN0-12	SPARE	YE038 NC	
IN0-13	SPARE	YE036 NC	
IN0-14	SPARE	YE035 NC	
IN0-15	MARK (KEYRUPT)	KE102	
IN1	COUNTER(24 HR)		
IN2-1	1600PPS		
IN2-2	800PPS		
IN2-3	400PPS		
IN2-4	200PPS		
IN2-5	SPARE	YE007 NC	SEE NOTE 1
IN2-6	SPARE RPT2	YE040 NC	
IN2-7	SPARE RPT2	YE004 NC	
IN2-8	SPARE RPT2	YE039 NC	
IN2-9	SPARE RPT2	YE112 NC	
IN2-10	CDU FAIL	YE124	
IN2-11	PIPA FAIL	YE138	
IN2-12	IMU FAIL	YE141	
IN2-13	SPARE	YE006 NC	SEE NOTE 1
IN2-14	SPARE	YE005 NC	
IN2-15	PARITY [illegible]		
IN3-1	K1	KE158	
IN3-2	K2	KE159	
IN3-3	K3	KE160	
IN3-4	K4	KE161	
IN7-5	K12	KE162	
IN3-6	TRN SW	KE164	
IN3-7	K5	KE163	
IN3-8	SPARE		
IN3-9	SPARE		
IN3-10	OPT MODE SW3	KE107 NC	
IN3-11	STAR PRES.	YE183	
IN3-12	ZERO OPT	KE104	
IN3-13	SEXTANT ON	KE105	
IN3-14	OPT MODE SW2	KE106	
IN3-15	OR OF C1-C33	KE210	

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL	
OUT0-1	RLYBIT 1	TE214	
OUT0-2	RLYBIT 2	TE215	
OUT0-3	RLYBIT 3	TE216	
OUT0-4	RLYBIT 4	TE217	
OUT0-5	RLYBIT 5	TE218	
OUT0-6	RLYBIT 6	TE219	
OUT0-7	RLYBIT 7	TE220	
OUT0-8	RLYBIT 8	TE221	
OUT0-9	RLYBIT 9	TE222	
OUT0-10	RLYBIT 10	TE223	
OUT0-11	RLYBIT 11	TE224	
OUT0-12	RLYWD 1	TE225	
OUT0-13	RLYWD 2	TE226	
OUT0-14	RLYWD 3	TE227	
OUT0-15	RLYWD 4	TE228	
OUT1-1	PROGRAM ALARM	T-229	
OUT1-2	COMP. ACTIVITY	T-230	
OUT1-3	KEY RLSE	T-236	
OUT1-4	TEL. ALARM	T-231	
OUT1-5	PRGM CHECK FAIL	T-232	
OUT1-6	SPARE		
OUT1-7	RUPT TRAP RESET (RUPT 2)		
OUT1-8	SPARE		
OUT1-9	ID WORD		
OUT1-10	BLOCK ENDPULSE		
OUT1-11	SPARE		
OUT1-12	SPARE		
OUT1-13	ENGINE ON	XB011	
OUT1-14	SPARE	XB013 NC	SEE NOTE 1
OUT1-15	SPARE	XB012 NC	
OUT2-1	RADAR C	OUTCR 3	
OUT2-2	RADAR B		
OUT2-3	RADAR A		
OUT2-4	THRUST	OUTCR 2	
OUT2-5	OPT Y		
OUT2-6	OPT X		
OUT2-7	+		
OUT2-8	-		
OUT2-9	Z	OUTCR 1	
OUT2-10	Y		
OUT2-11	X		
OUT2-12	GYRO		
OUT2-13	CDU		
OUT2-14	+		
OUT2-15	-		
OUT3	SPARE(INPUT OR OUTPUT)		
OUT4-1 OUT4-2 : : : : : : OUT4-16		16 BITS FOR DOWN LNK DATA	

NOTE:

1. NC SIGNIFIES THAT THE SIGNALS ARE NOT WIRED THROUGH TRAY C TO CONNECTORS 05A3J1 AND 05A3P1

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIN NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT

DRAWN ______ DATE ______
CHECKED ______
APPROVAL Donald J Bowles
APPROVAL Eldon C Hall
NASA APPROVAL 4/24/63
MIT APPROVAL 24 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006095
SCALE
WT
SHEET OF

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00930

SYM	DESCRIPTION	DATE	APPROVAL

IN BITS

IN BIT	NAME	INTERFACE SIGNAL
IN0-1	KEY CODE 1 (KEYRUPT)	TE214
IN0-2	KEY CODE 2 (KEYRUPT)	TE215
IN0-3	KEY CODE 3 (KEYRUPT)	TE216
IN0-4	KEY CODE 4 (KEYRUPT)	TE217
IN0-5	KEY CODE 5 (KEYRUPT)	TE218
IN0-6	BLOCK UPLNK	SD246
IN0-7	INHIBIT UPSYNC	
IN0-8	ALARM	
IN0-9	ALARM	
IN0-10	ALARM	
IN0-11	LRL	YE037 NC
IN0-12	LRH	YE038 NC
IN0-13	LANRLO	YE036 NC
IN0-14	RENRLO	YE035 NC
IN0-15	MARK (KEYRUPT)	KE102
IN1	SPARE	
IN2-1	1600PPS	
IN2-2	800PPS	
IN2-3	400PPS	
IN2-4	200PPS	
IN2-5	SPARE	
IN2-6	REND. RADAR FAIL	YE040 NC
IN2-7	ULLAGE RPT 2	YE004 NC
IN2-8	TRKR FAIL RPT 2	YE039 NC
IN2-9	OPT FAIL RPT 2	YE112 NC
IN2-10	CDU FAIL RPT 2	YE124
IN2-11	PIPA FAIL RPT 2	YE138
IN2-12	IMU FAIL RPT 2	YE141
IN2-13	ABORT RPT 2	YE006 NC
IN2-14	SATURN OUT RPT 2	YE005 NC
IN2-15	LIFT OFF RPT 2	YE007 NC
IN3-1	K1	KE158
IN3-2	K2	KE159
IN3-3	K3	KE160
IN3-4	K4	KE161
IN7-5	K5	KE162
IN3-6	TRN SW	KE164
IN3-7	K6	KE163
IN3-8	IMU ON	KE113 NC
IN3-9	SPARE	
IN3-10	OR OF C1-C27	KE210
IN3-11	RADAR POWER ON	YE033 NC
IN3-12	ZERO OPT	KE104
IN3-13	SEXTANT ON	KE105
IN3-14	OPT MODE SW2	KE106 NC
IN3-15	OPT MODE SW3	KE107 NC

OUT BITS

OUT BIT	NAME	INTERFACE SIGNAL
OUT0-1	RLYBIT 1	TE214
OUT0-2	RLYBIT 2	TE215
OUT0-3	RLYBIT 3	TE216
OUT0-4	RLYBIT 4	TE217
OUT0-5	RLYBIT 5	TE218
OUT0-6	RLYBIT 6	TE219
OUT0-7	RLYBIT 7	TE220
OUT0-8	RLYBIT 8	TE221
OUT0-9	RLYBIT 9	TE222
OUT0-10	RLYBIT 10	TE223
OUT0-11	RLYBIT 11	TE224
OUT0-12	RLYWD 1	TE225
OUT0-13	RLYWD 2	TE226
OUT0-14	RLYWD 3	TE227
OUT0-15	RLYWD 4	TE228
OUT1-1	SPARE	
OUT1-2	ALARM 1	T-229
OUT1-3	ALARM 2	T-230
OUT1-4	ALARM 3	T-231
OUT1-5	ALARM 4	T-232
OUT1-6	BLOCK UPLNK	
OUT1-7	RUPT TRAP RESET (RUPT 2)	
OUT1-8	SPARE	
OUT1-9	ID WORD	
OUT1-10	BLOCK ENDPULSE	
OUT1-11	SPARE	
OUT1-12	SPARE	
OUT1-13	ENGINE ON	
OUT1-14	ENGINE SEQUENCE START	
OUT1-15	ENGINE STOP	

OUT2-1	RADAR C	OUTCR 3
OUT2-2	RADAR B	
OUT2-3	RADAR A	
OUT2-4	THRUST	OUTCR 2
OUT2-5	OPT Y	
OUT2-6	OPT X	
OUT2-7	+	
OUT2-8	-	
OUT2-9	Z	OUTCR 1
OUT2-10	Y	
OUT2-11	X	
OUT2-12	GYRO	
OUT2-13	CDU	
OUT2-14	+	
OUT2-15	-	
OUT3	SPARE	
OUT4-1		16 BITS FOR DOWN LNK DATA
OUT4-2		
: :		
OUT4-16		

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

DRAWN ______ DATE ______
CHECKED ______
APPROVAL Donald J Bowles 4/24/63
APPROVAL Eldon C Hall
NASA APPROVAL 4/24/63
MIT APPROVAL 24Apr63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

INPUT - OUTPUT BIT ASSIGNMENTS

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006095
SCALE
WT
SHEET OF

1006095

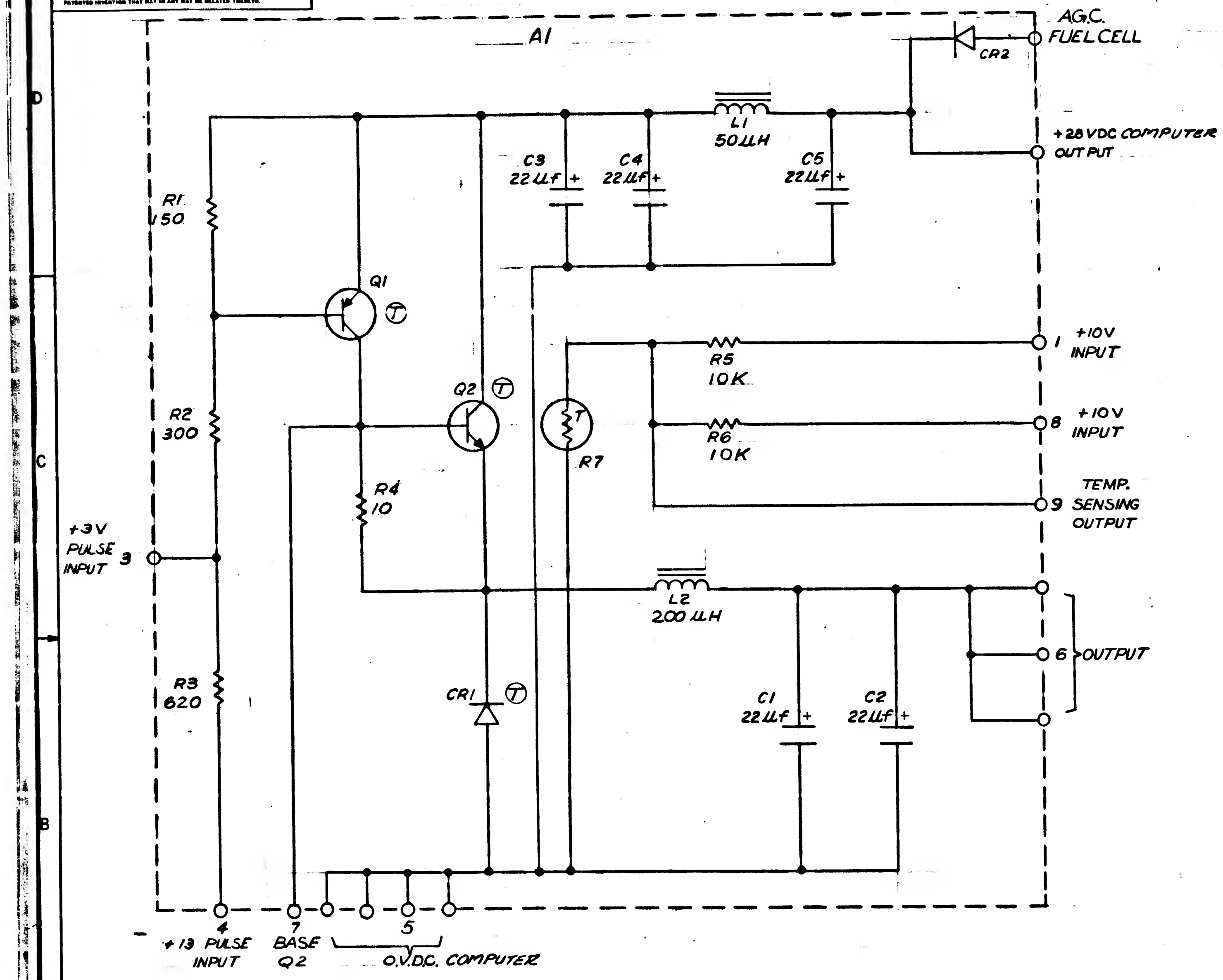
INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

(M)

REVISIONS TDRR 00354

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248	6-15-63	[illegible] WK



NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS

REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1010393	CAP	22 µf		
C2	↕	↕	↕		
C3					
C4					
C5	1010393	CAP	22 µf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE	50 µH		
L2	1006800	CHOKE	200 µH		
R1	1006750-12	RES	150		
R2	1010389-43	↕	300		
R3	1010389-51		620		
R4	10067[illegible] 5		10		
R5	10067[illegible] 56		10 K		
R6	1006750-56	RES	10 K		
R7	1010434	THERMISTOR			
Q1	1006804	TSTR			
Q2	1006827	TSTR			

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
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HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN H. Carlson DATE 4-17-63
CHECKED
APPROVAL E. Auger 4/20/63
APPROVAL Eldon C. Hall 4/22/63
J. E. [illegible]
NASA APPROVAL [illegible] 4/24/63
MIT APPROVAL [illegible] 2/4/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
POWER SWITCH STICK
A.G.C. SWITCHING REGULATOR

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

1006097 A

MASTER

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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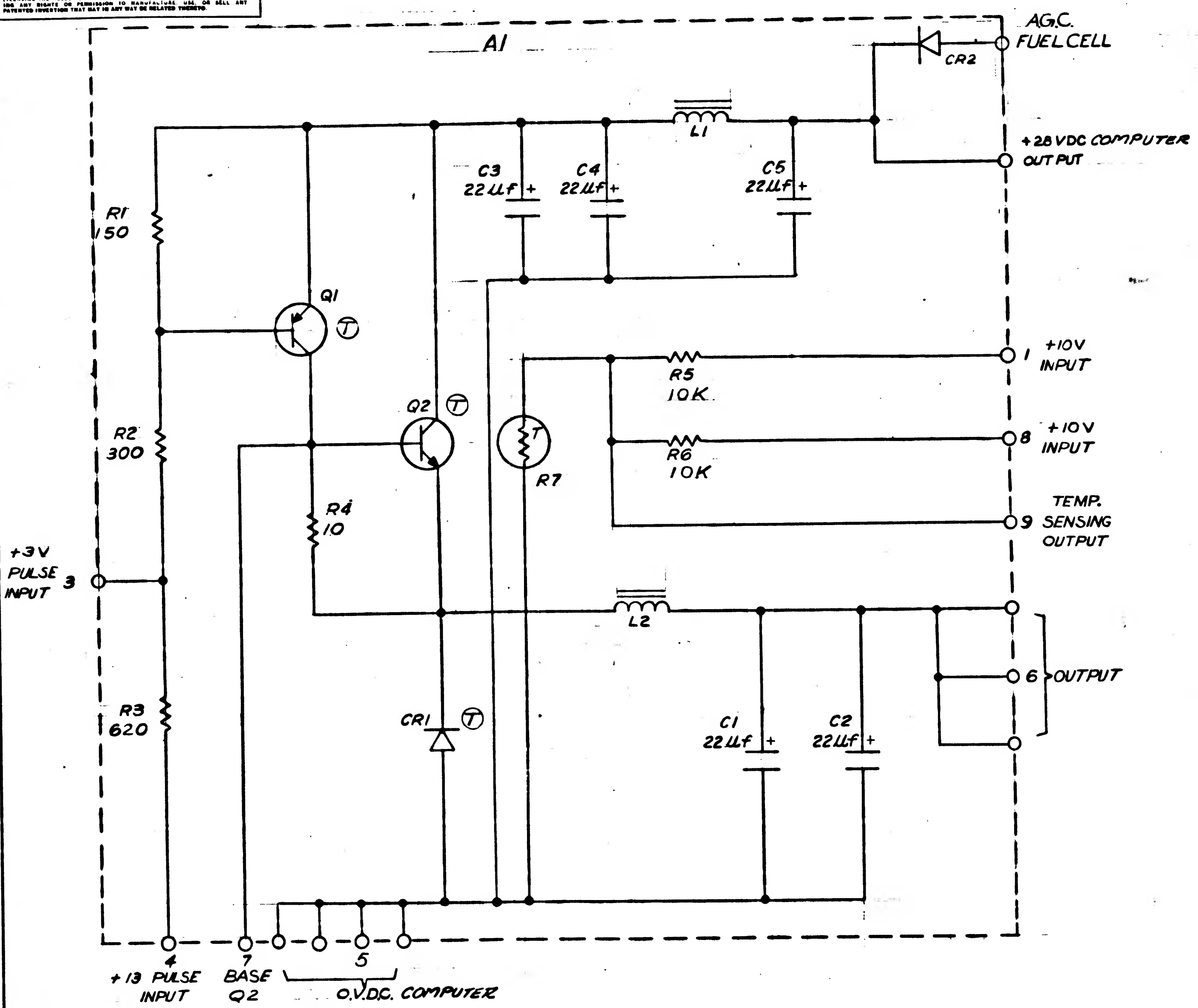
REVISIONS TDRR 00354

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248		WK
B	REVISED PER TDRR 01459	1-63	



NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS

REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1006755	CAP	22 uf		
C2	↑	↑	↑		
C3					
C4	↓	↓	↓		
C5	1006755	CAP	22 uf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE			
L2	1006800	CHOKE			
R1	1006750-12	RES	150		
R2	1010389-43	↑	300		
R3	1010389-51		620		
R4	1006788-6		10		
5	1006750-56	↓	10 K		
R6	1006750-56	RES	10 K		
R7	1010434	THERMISTOR			
Q1	1006829	TSTR			
Q2	1006827	TSTR			

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN H. Carlson DATE 4-17-63
CHECKED
APPROVAL E. Auger 4/29/63
APPROVAL Eldon C Hall 24 April 63
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

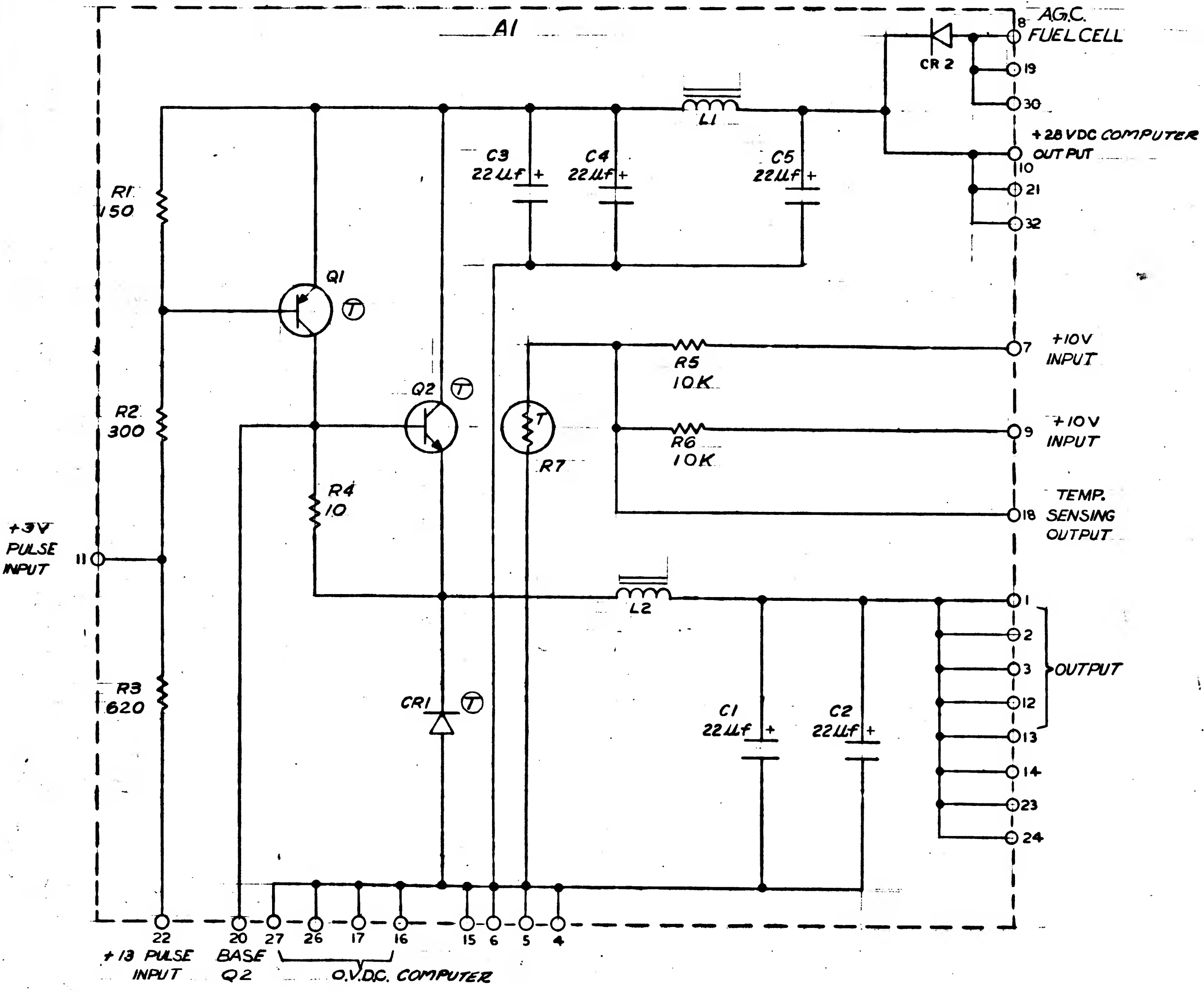
SCHEMATIC
POWER SWITCH STICK
A.G.C. SWITCHING REGULATOR

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS TDRR 00954			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248	[illegible]	WK.
B	REVISED PER TDRR 01459	6-1-63	[illegible]
C	REVISED PER TDRR 02055	7/1/60	[illegible]



NOTES

1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS

REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1006755	CAP	22µf		
C2	↕	↕	↕		
C3	↕	↕	↕		
C4	↕	↕	↕		
C5	1006755	CAP	22µf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE			
L2	1006800	CHOKE			
R1	1006750-12	RES	150		
R2	1010389-43	↕	300		
R3	1010389-51	↕	620		
R4	1006788-6	↕	10		
R5	1006750-56	↕	10 K		
R6	1006750-56	RES	10 K		
R7	1010434	THERMISTOR			
Q1	1006829	TSTR			
Q2	1006827	TSTR			

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN H. Carlson DATE 4-17-63
CHECKED
APPROVAL E. Auger 4/29/63
APPROVAL Eldon C Hall 24 April 63
[illegible]
NASA APPROVAL [illegible] 4/29/63
MIT APPROVAL [illegible] 2 Aug 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
POWER SWITCH MODULE A.G.C. POWER SUPPLY

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

1006097 C

MASTER

INCHES 0 1 2
PHOTOGRAPHIC SCALE ONLY

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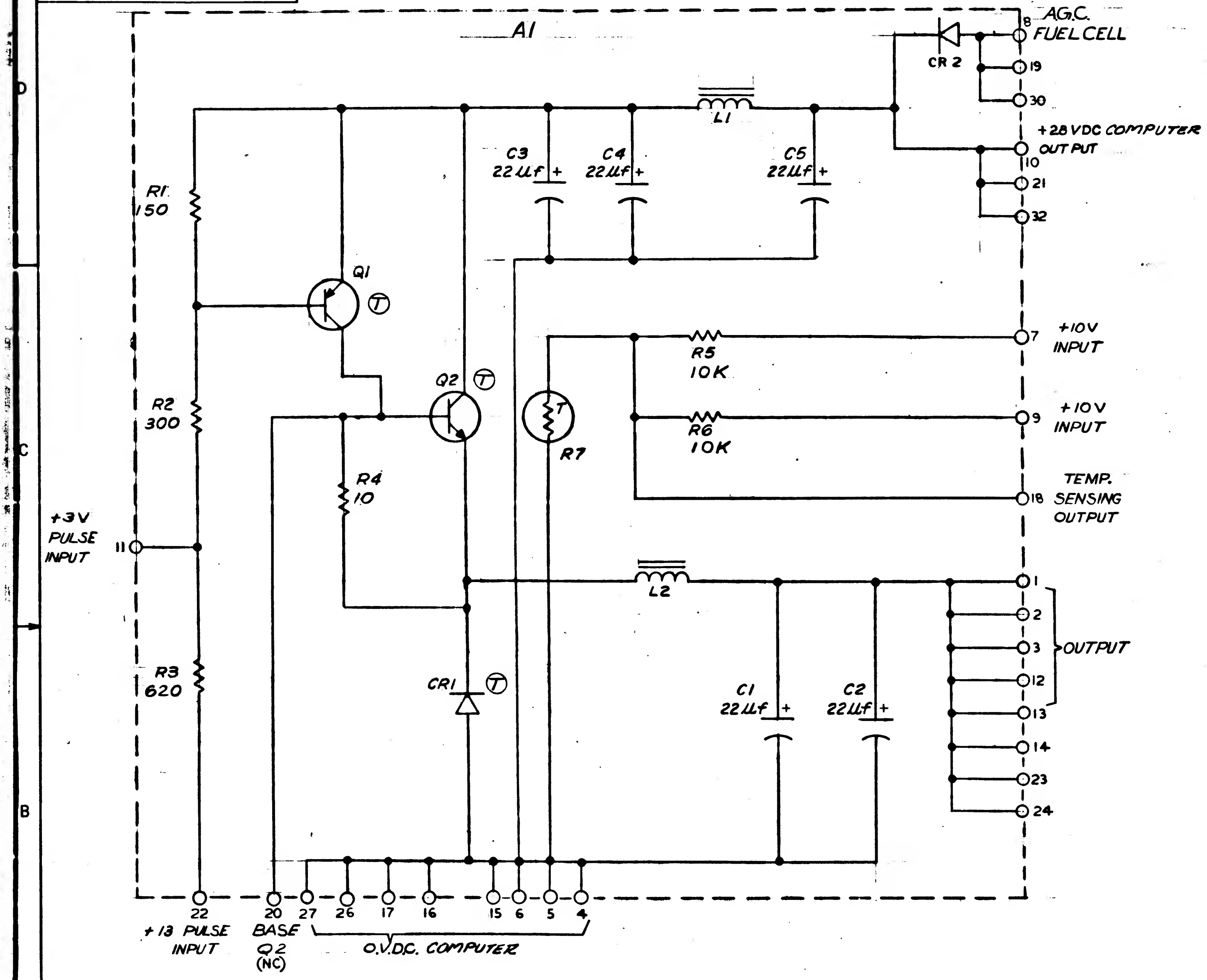
REVISIONS TDRR 00954

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248	6-15-63	WK.
B	REVISED PER TDRR 01459	6-1-63	
C	REVISED PER TDRR 02055	7/1/63	
D	REVISED PER TDRR 03131	9-12-63	WK



REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1006755-134	CAP	22µf		
C2	↑	↑	↑		
C3					
C4	↓	↓	↓		
C5	1006755-134	CAP	22µf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE	50MH		
L2	1006800	CHOKE	150MH		
R1	1006750-12	RES	150		
R2	1010389-43	↑	300		
R3	1010389-51		620		
R4	1006788-6		10		
R5	1006750-56	↓	10 K		
R6	1006750-56	RES	10 K		
R7	1006715-2	THERMISTOR	10 K		
Q1	1006829	TSTR			
Q2	1006827	TSTR			

NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS, K INDICATES THOUSANDS OF OHMS

REF DWG:
1. MECHANICAL ASSY 1003113

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

MASTER

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN H. Carlson DATE 6-17-63
CHECKED
APPROVAL E. Auger 4/20/63
APPROVAL Eldon C Hall 24 April 63
NASA APPROVAL 4/29/63
MIT APPROVAL 2-4-63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
POWER SWITCH MODULE
A.G.C. POWER SUPP_Y

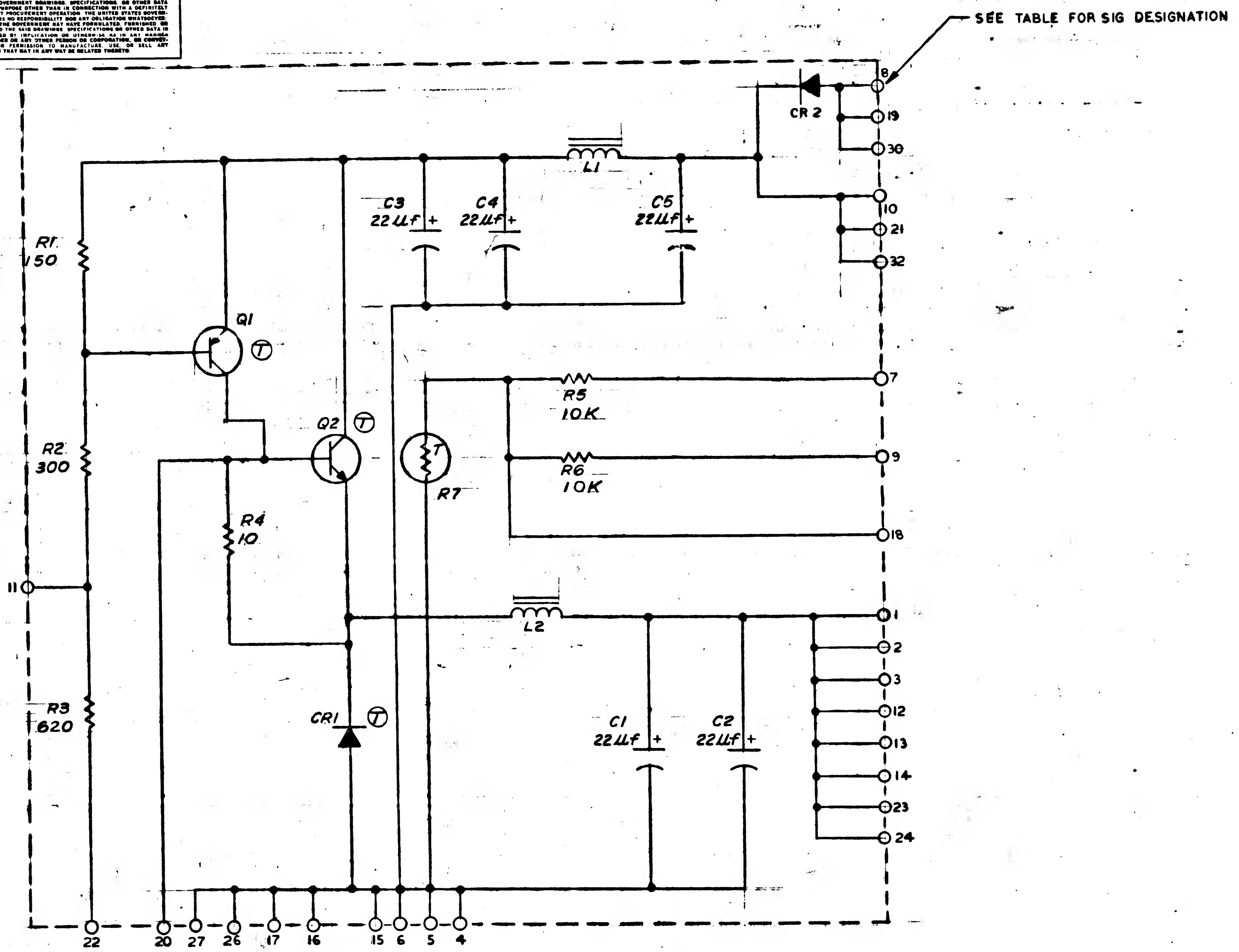
CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006097 D

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

		REVISIONS TDRR 00954		
	SYM	DESCRIPTION	DATE	APPROVAL
(M)	A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248		WK.
(M)	B	REVISED PER TDRR 01459	6-1-63	
(M)	C	REVISED PER TDRR 02055	7/1/63	
(M)	D	REVISED PER TDRR 03131	9-12-63	WK
	E	REVISED PER TDRR 03457		



REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1006755-134	CAP	22µf		
C2					
C3					
C4					
C5	1006755-134	CAP	22µf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE	50MH		
L2	1006800	CHOKE	150MH		
R1	1006750-12	RES	150		
R2	1010389-43		300		
R3	1010389-51		620		
R4	1006788-6		10		
R5	1006750-56		10 K		
R6	1006750-56	RES	10 K		
R7	1006715-2	THERMISTOR	10 K		
Q1	1006823	TSTR			
Q2	1006827	TSTR			

PIN NO.	SIGNAL DESIGNATION		
	TRAY POS B2	TRAY POS B3	TRAY POS B4
8,19,30	N.C.	+28 B	+28A
10,21,32	+28 COM	+28 COM	+28 COM
7	B PLUS A	B PLUS A	B PLUS A
9	N.C.	N.C.	N.C.
18	RD 171	RD 172	RD 173
1,2,3,12,13,14	B PLUS B	+3B	+3B
23, 24	B PLUS A	+3A	+3A
4,5,6,15,16,17,26,27	OVDC	OVDC	OVDC
20	N.C.	BSQ 2	BSQ 2
22	+13PLS	N.C.	N.C.
11	N.C.	+3PLS	+3PLS

NOTES

1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS, K INDICATES THOUSANDS OF OHMS
2. N.C. INDICATES NO. CONNECTION FOR MODULE IN THIS TRAY POSITION

REF DWG:
1. MECHANICAL ASSY 1003113

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN H. Carlson DATE 4-11-63
CHECKED
APPROVAL E. Auger 4/20/63
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
POWER SWITCH MODULE
A.G.C. POWER SUPPLY

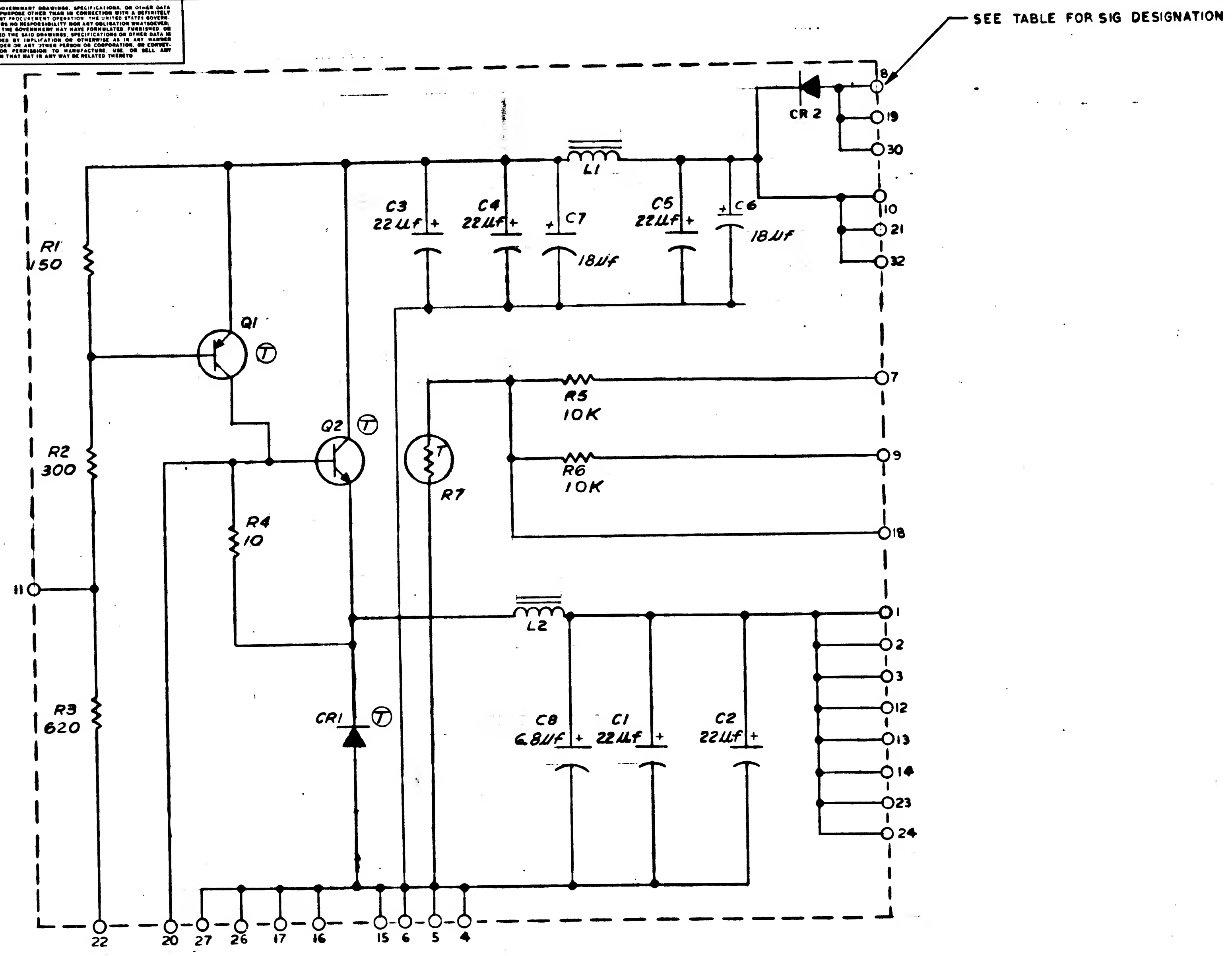
CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

MASTER

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS TDRR 00954			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248		WK.
B	REVISED PER TDRR 01459	6-1-63	
C	REVISED PER TDRR 02055	7/1/63	
D	REVISED PER TDRR 03131	9-18-63	WK
E	REVISED PER TDRR 03457		
F	REVISED PER TDRR 07345 DR CHK APPD		HWC



REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1006755-134	CAP	22µf		
C2	-134				
C3	-134				
C4	-134				
C5	-134		22µf		
C6	-133		18µf		
C7	-133		18µf		
C8	1006755-79	CAP	6.8µf		
CR1	1006791	DIODE			
CR2	1006791	DIODE			
L1	1006798	CHOKE	50µf		
L2	1006800	CHOKE	250µf		
R1	1006750-12	RES	150		
R2	1010389-43		300		
R3	1010389-51		620		
R4	1006788-6		10		
R5	1006750-56		10 K		
R6	1006750-56	RES	10 K		
R7	1006715-2	THERMISTOR	10 K		
Q1	1006829	TSTR			
Q2	1006827	TSTR			

PIN NO.	SIGNAL DESIGNATION		
	TRAY POS B2	TRAY POS B3	TRAY POS B4
8,19,30	N.C.	+28 B	+28A
10,21,32	+28 COM	+28 COM	+28 COM
7	B PLUS A	B PLUS A	B PLUS A
9	N.C.	N.C.	N.C.
18	RD 171	RD 172	RD 173
1,2,3,12,13,14	B PLUS B	+3B	+3B
23, 24	B PLUS A	+3A	+3A
4,5,6,15,16,17,26,27	OVDC	OVDC	OVDC
20	N.C.	BSQ2	BSQ2
22	+13PLS	N.C.	N.C.
11	N.C.	+3PLS	+3PLS

NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS, K INDICATES THOUSANDS OF OHMS
2. N.C. INDICATES NO CONNECTION FOR MODULE IN THIS TRAY POSITION

REF DWG:
L MECHANICAL ASSY 1003113

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN DATE 4-17-63
CHECKED
APPROVAL E. Auger 4/30/63
APPROVAL
NASA APPROVAL
MIT APPROVAL 24 May 63

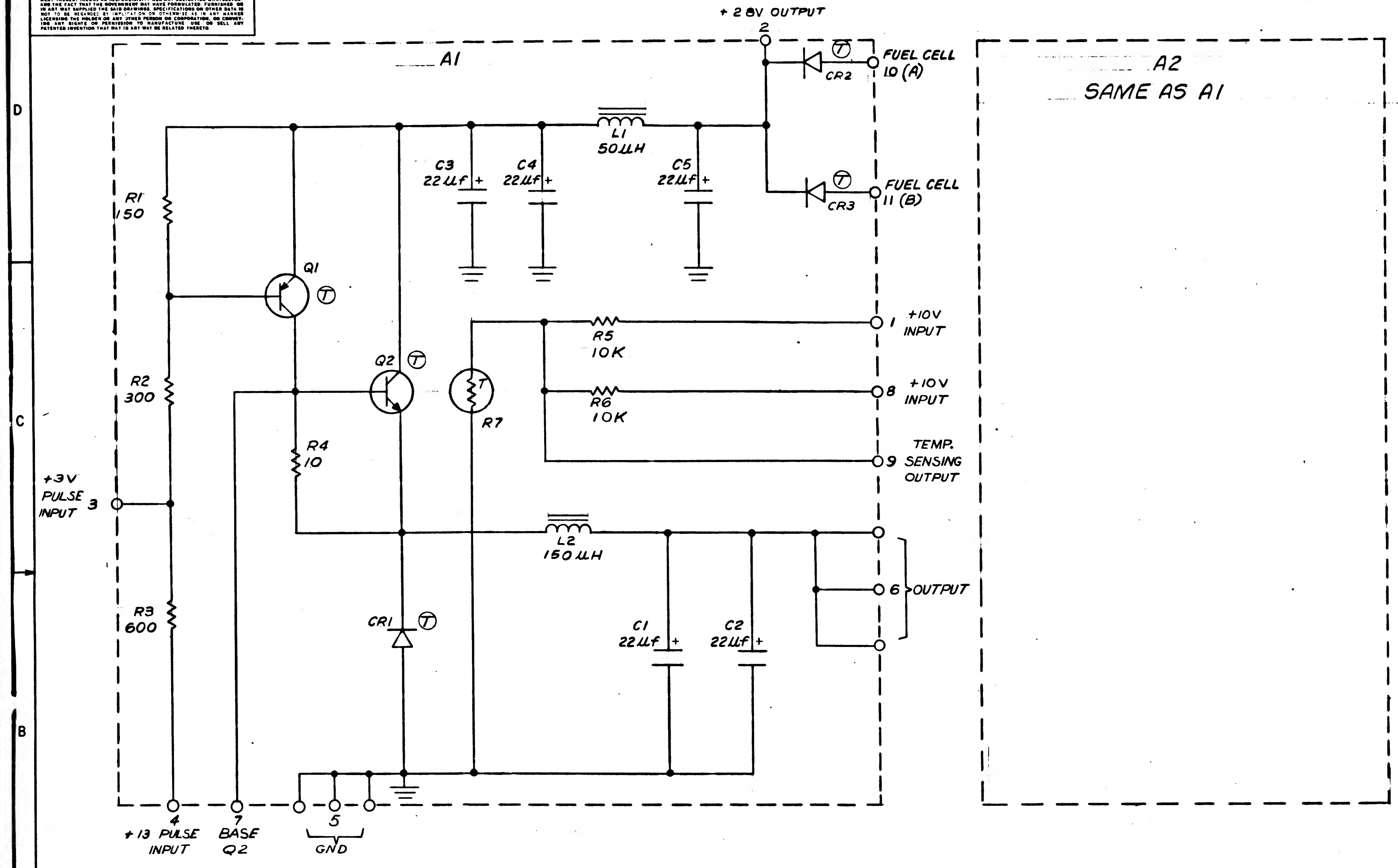
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
POWER SWITCH MODULE
A.G.C. POWER SUPPLY

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006097
SCALE
WT
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00554 DATE 24Apr63

REF DES	PART NO.	DESCR	VALUE	TOL	RATING
C1	1010393	CAP	22µf		
C2	↕	↕	↕		
C3					
C4					
C5	1010393	CAP	22µf		
CR1	1006791	DIODE			
CR2	1010322	DIODE			
CR3	1010322	DIODE			
L1	1006798	CHOKE	50µH		
L2	1006800	CHOKE	150µH		
R1	1006750	RES	150		
R2	1010312	↕	300		
R3	1010312		600		
R4	1006802		10		
R5	1006750-56		10 K		
R6	1006750-56	RES	10 K		
R7	1010434	THERMISTOR			
Q1	1006804	TSTR			
Q2		TSTR			

NOTES
1. UNLESS OTHERWISE SPECIFIED ALL RESISTOR VALUES ARE EXPRESSED IN OHMS

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN H. Carlson DATE 4-17-63
CHECKED
APPROVAL E. Auger 4/20/63
APPROVAL Eldon C Hall 24 April 63
NASA APPROVAL 4/24/63
MIT APPROVAL 24 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

POWER SWITCH STICK
A.G.C. SWITCHING REGULATOR

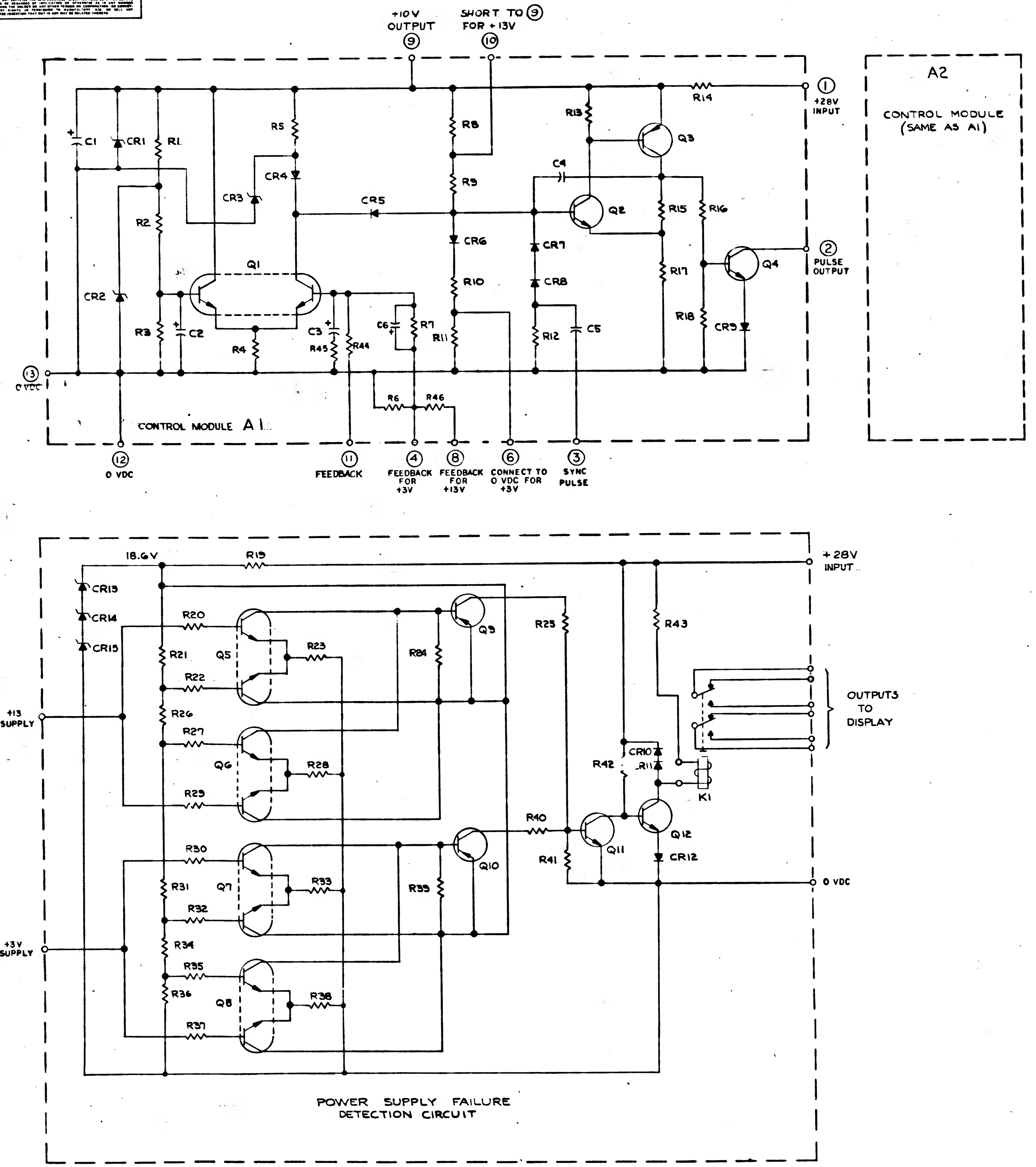
CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006097
SCALE | WT | SHEET 1 OF 1

MASTER

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006097

REVISIONS CLASS B TDRR [illegible]			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR	5-9-63	
	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01249	5-15-63	ECN wk


+10V OUTPUT ⑨
SHORT TO ⑨ FOR +13V ⑩
① +28V INPUT
② PULSE OUTPUT
③ 0 VDC
⑫ 0 VDC
⑪ FEEDBACK
④ FEEDBACK FOR +3V
⑧ FEEDBACK FOR +13V
⑥ CONNECT TO 0 VDC FOR +3V
③ SYNC PULSE
CONTROL MODULE A1
C1 CR1 R1 R2 R3 C2 CR2 R4 R5 CR4 CR3 Q1 CR5 C3 R45 R44 C6 R7 R11 R6 R46 R8 R9 CR6 R10 C4 CR7 CR8 R12 C5 R13 Q3 Q2 R14 R15 R16 R17 R18 CR9 Q4
A2
CONTROL MODULE (SAME AS A1)
18.6V R19 +28V INPUT
CR13 CR14 CR15
R20 R21 R22 Q5 R23 R24 Q9 R25 R43
R26 R27 Q6 R28 R29
+13 SUPPLY
+3V SUPPLY
R30 R31 R32 Q7 R33 R39 Q10 R40 R41 Q11 Q12 CR12
R34 R35 R36 Q8 R38 R37
R42 CR10 CR11 K1
OUTPUTS TO DISPLAY
0 VDC
POWER SUPPLY FAILURE DETECTION CIRCUIT

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1010393	CAP.	22 UF		
C2	1006755-26	CAP.	1.2 UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006844-6	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP	0.1 UF		
CR1	1010290-2	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V	1%	
CR3	1006838	DIODE	6.2V	1%	
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V	1%	
CR14	1010259-2	DIODE	6.2V	1%	
CR15	1010259-2	DIODE	6.2V	1%	
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006804	TSTR			
Q10	1006804	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2	1006750-39	RES	2000Ω	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-24	RES	470Ω	2%	1/4 W
R7	100675 43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
R10	1006750-55	RES	9100Ω	2%	1/4 W
R11	1006750-66	RES	27K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω		
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-29	RES	750Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21	1006750-36	RES	1500Ω	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-27	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-44	RES	3300Ω	2%	1/4 W
R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-36	RES	1500Ω	2%	1/4 W

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE
CHECKED
APPROVAL E. Augur 4/23/63
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

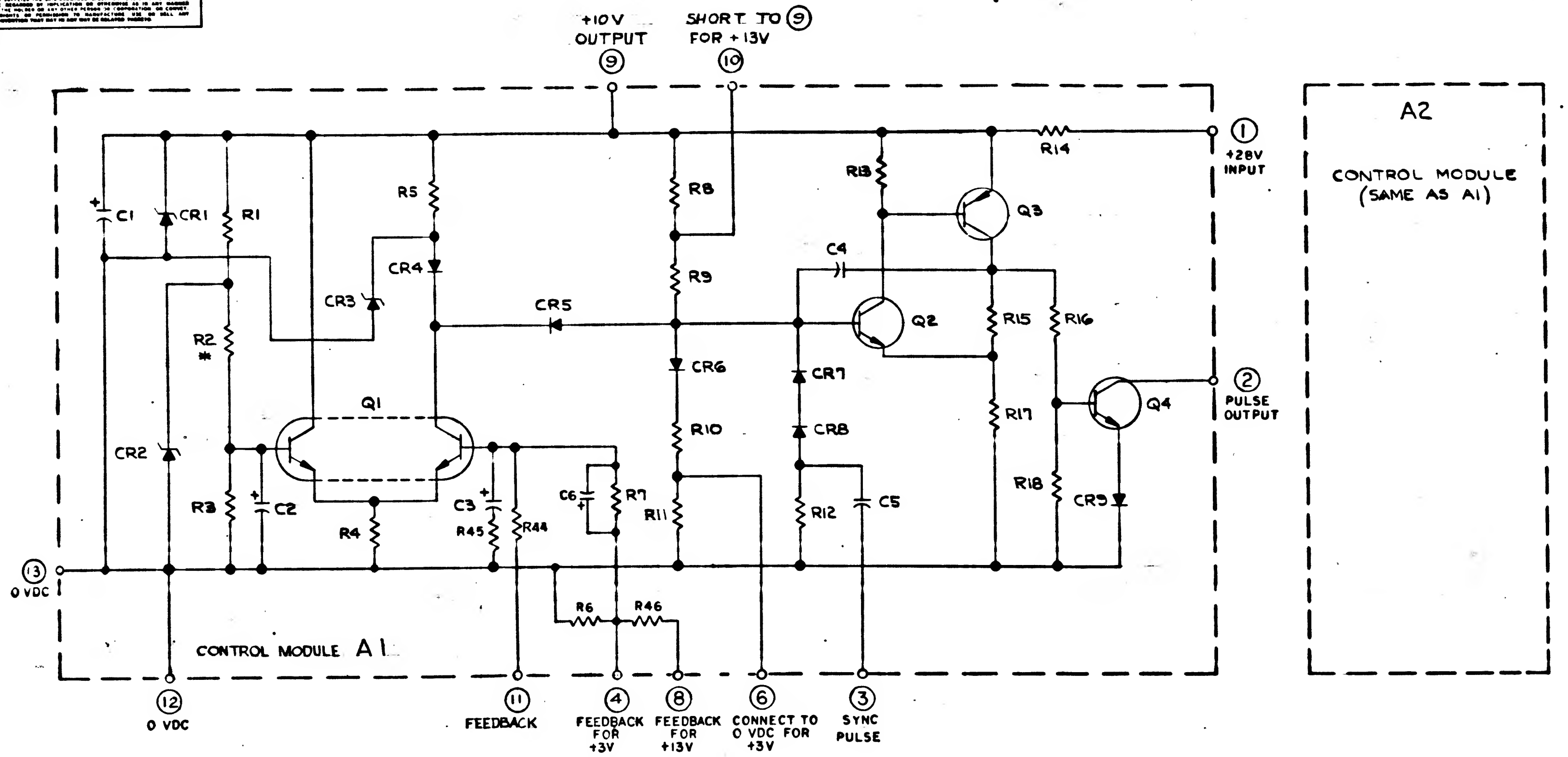
CONTROL STICK
A.G.C. SWITCHING REGULATOR

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006098
SCALE
WT
SHEET 1 OF 1

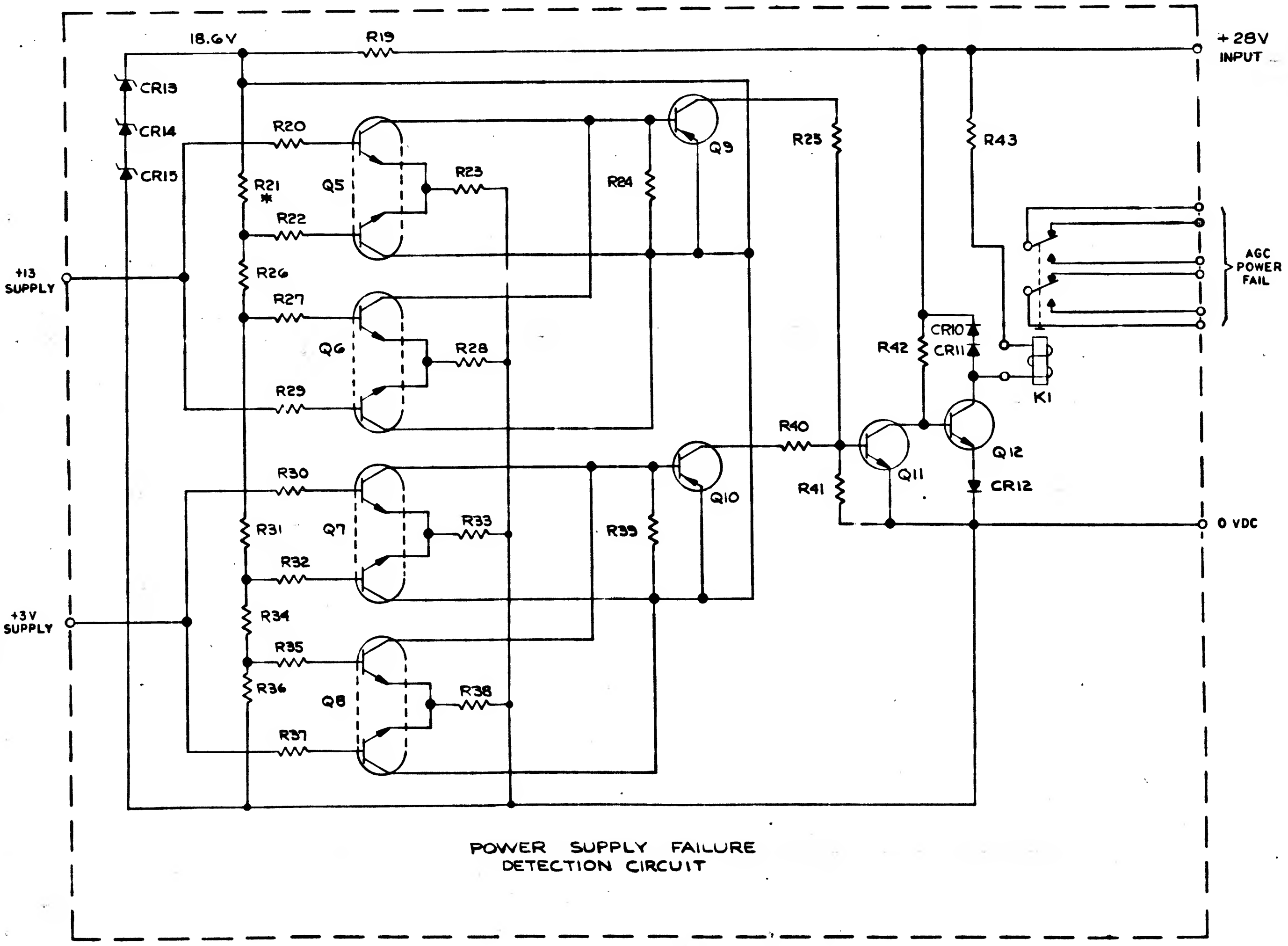
MASTER

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

SYM	DESCRIPTION	DATE	APPROVAL
	REVISIONS CLAS: B TDRR 209		
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 0249	6-4-63	
B	REVISED PER TDRR 01459	5-4-63	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755	CAP.	22 UF		
C2	1006755-26	CAP.	1.2 UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-24	RES	470Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
R10	1006750-55	RES	9100Ω	2%	1/4 W
R11	1006750-66	RES	27K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω		
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-29	RES	750Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21 *	1006750	RES	NE	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-27	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-44	RES	3300Ω	2%	1/4 W
R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-36	RES	1500Ω	2%	1/4 W



POWER SUPPLY FAILURE DETECTION CIRCUIT

TABLE 1

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

NOTES:

* 1. NOMINAL VALUE TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL E. Auger 4/23/63
APPROVAL
NASA APPROVAL 4/24/63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

CONTROL STICK
AGC SWITCHING REGULATOR

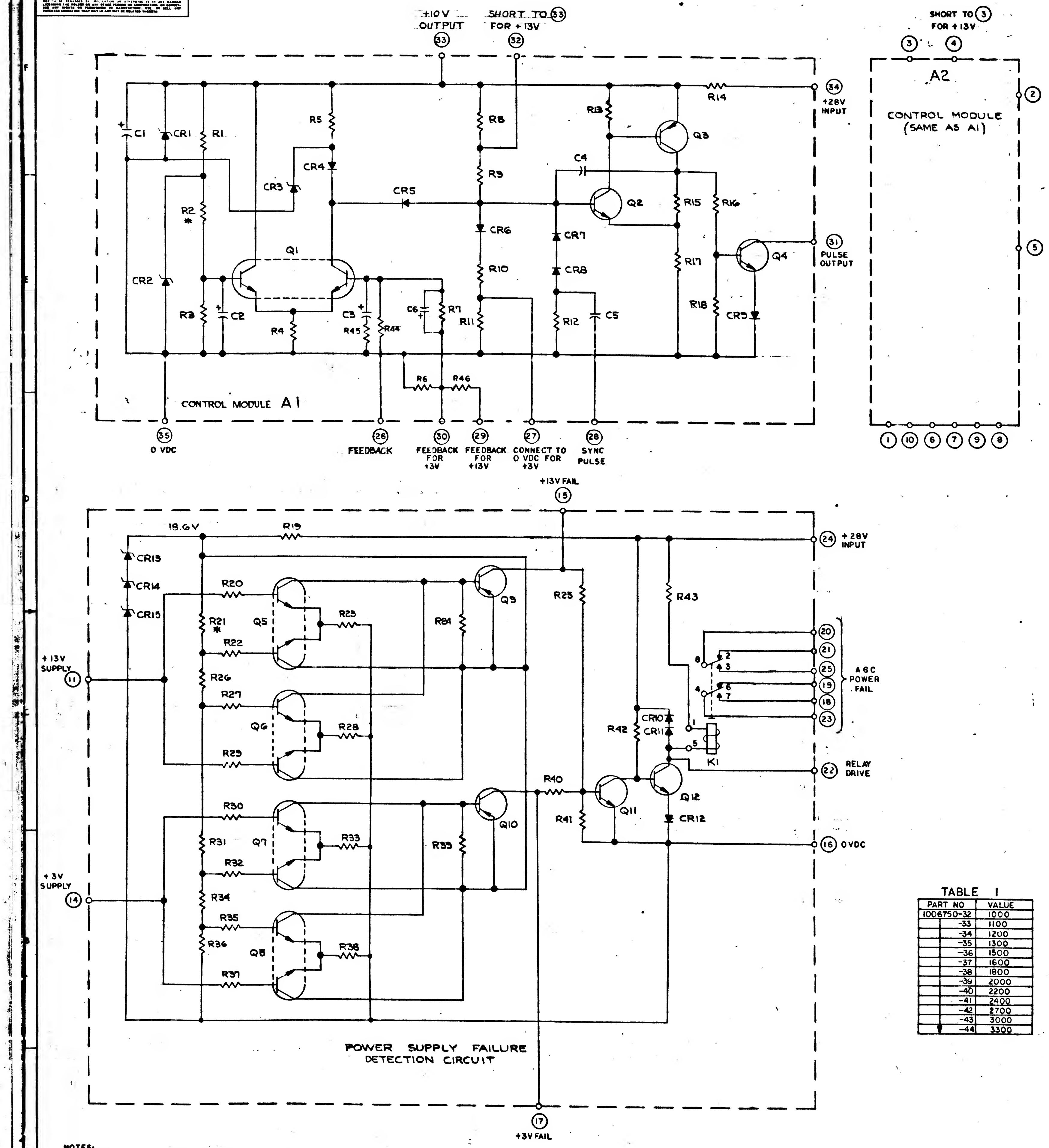
CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006098
SCALE | WT | SHEET 1 OF 1

1006098 B

INCHES
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS CLASS B TDRR 00			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01249	6-4-63	
B	REVISED PER TDRR 01458	6-4-63	
C	REVISED PER TDRR 02050		



NOTES:

* 1. NOMINAL VALUE, TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755	CAP.	22 UF		
C2	1006755-26	CAP.	1.2UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793	CAP.	.0056UF		
C5	1006777-24	CAP.	.001UF		
C6	1006755-57	CAP	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-24	RES	470Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
R10	1006750-55	RES	9100Ω	2%	1/4 W
R11	1006750-66	RES	27K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω		
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	690Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-29	RES	750Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21 *	1006750	RES	NE	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-27	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-44	RES	3300Ω	2%	1/4 W
R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-36	RES	1500Ω	2%	1/4 W

TABLE 1

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL E. Auger 4/23/63
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CONTROL MODULE AGC POWER SUPPLY

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006098
SCALE —
WT —
SHEET 1 OF 1

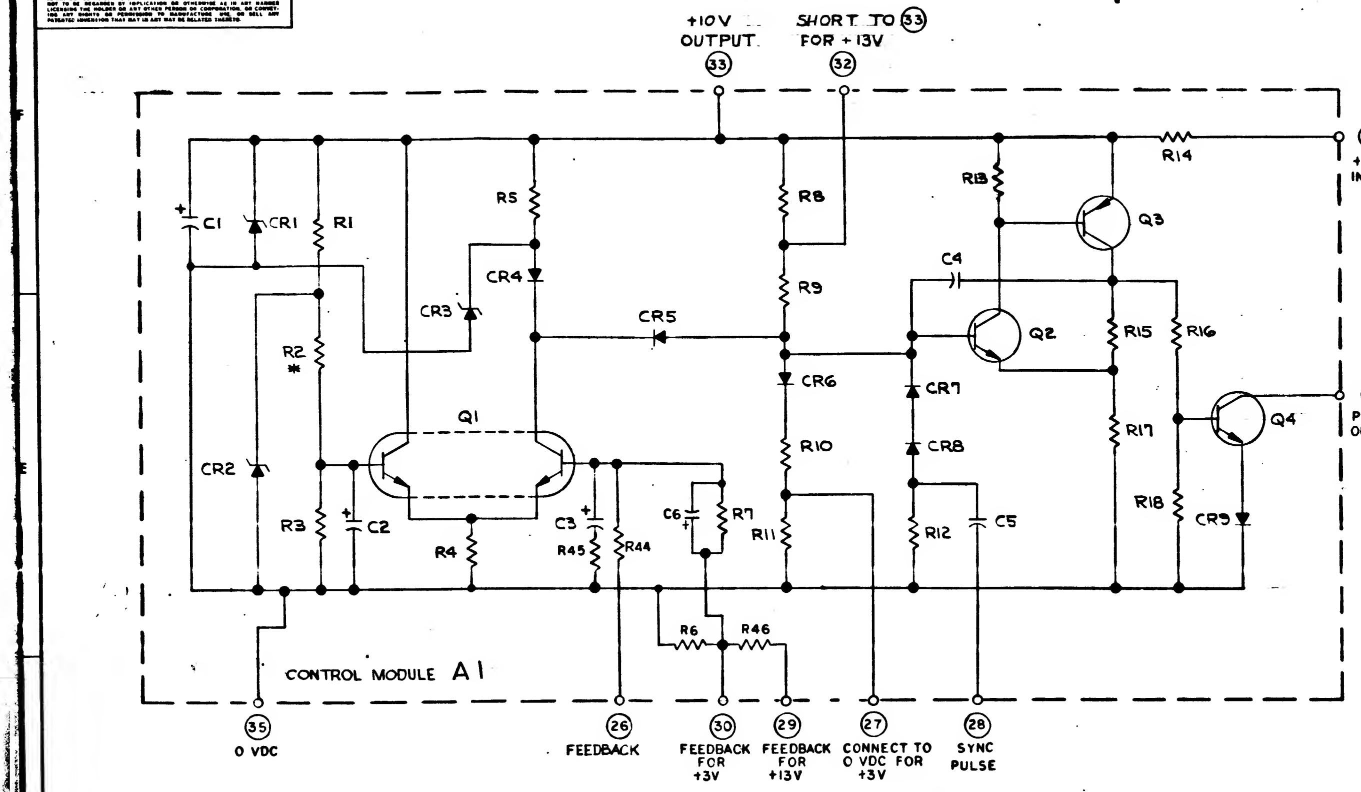
INCHES
PHOTOGRAPHIC SCALE ONLY

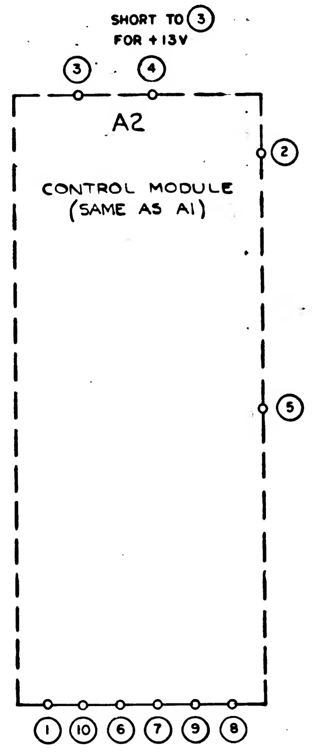
1006098 C

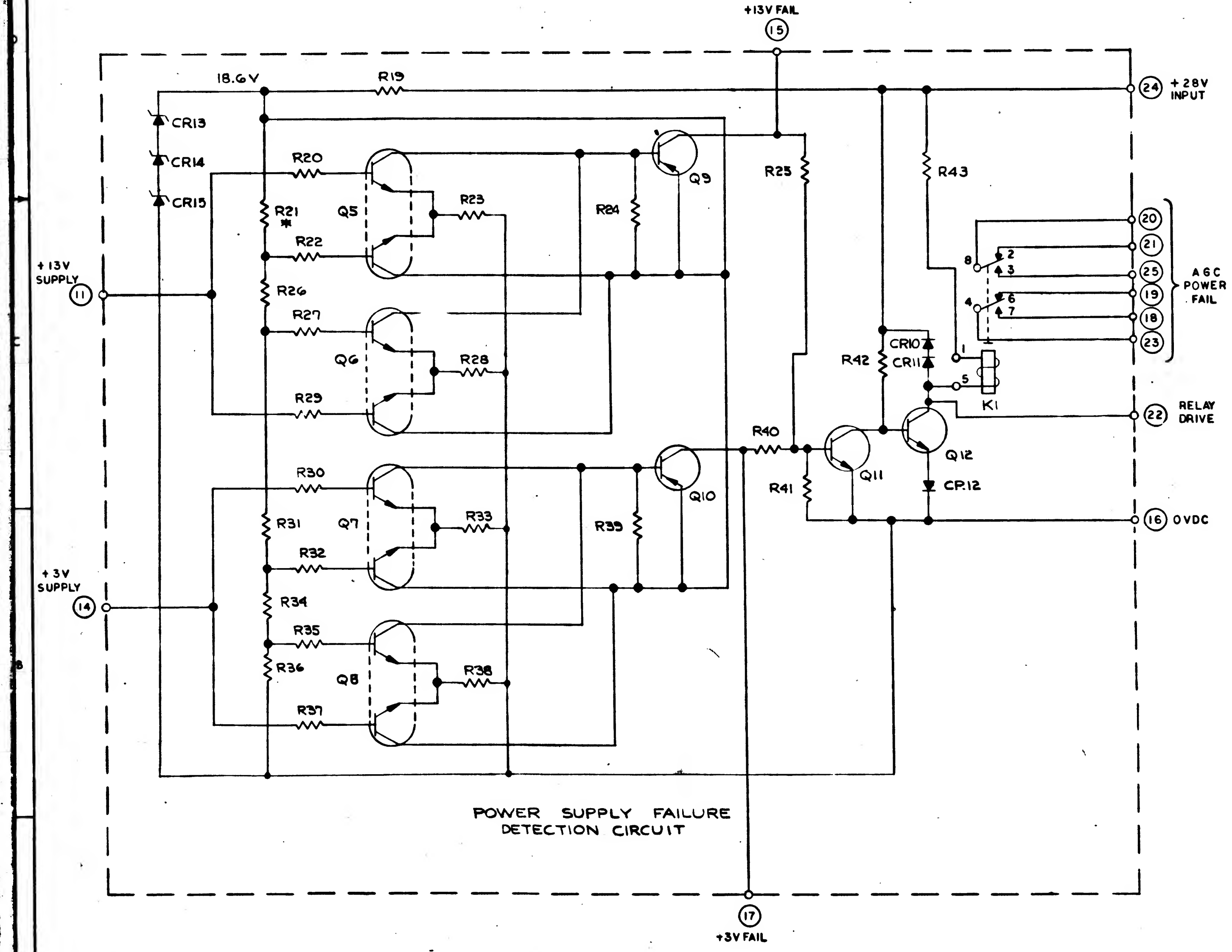
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS CLASS B TDRR 009

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR C1249	6-4-63	
B	REVISED PER TDRR 01458	6-4-63	
C	REVISED PER TDRR 02050	7-1-63	
D	REVISED PER TDRR 03 3 5	9-18-63	







REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755-134	CAP.	22 UF		
C2	1006755-26	CAP.	1.2 UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793-30	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP.	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-24	RES	470Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
R10	1006750-55	RES	9100Ω	2%	1/4 W
R11	1006750-66	RES	27K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω	1%	3 W
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-29	RES	750Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21 *	1006750	RES	NE	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-21	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-44	RES	3300Ω	2%	1/4 W
R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-36	RES	1500Ω	2%	1/4 W

TABLE I

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

NOTES:
* 1. NOMINAL VALUE TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE I

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1003150	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL E. Augun 4/23/63
APPROVAL
NASA APPROVAL 4/29/63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CONTROL MODULE AGC POWER SUPPLY

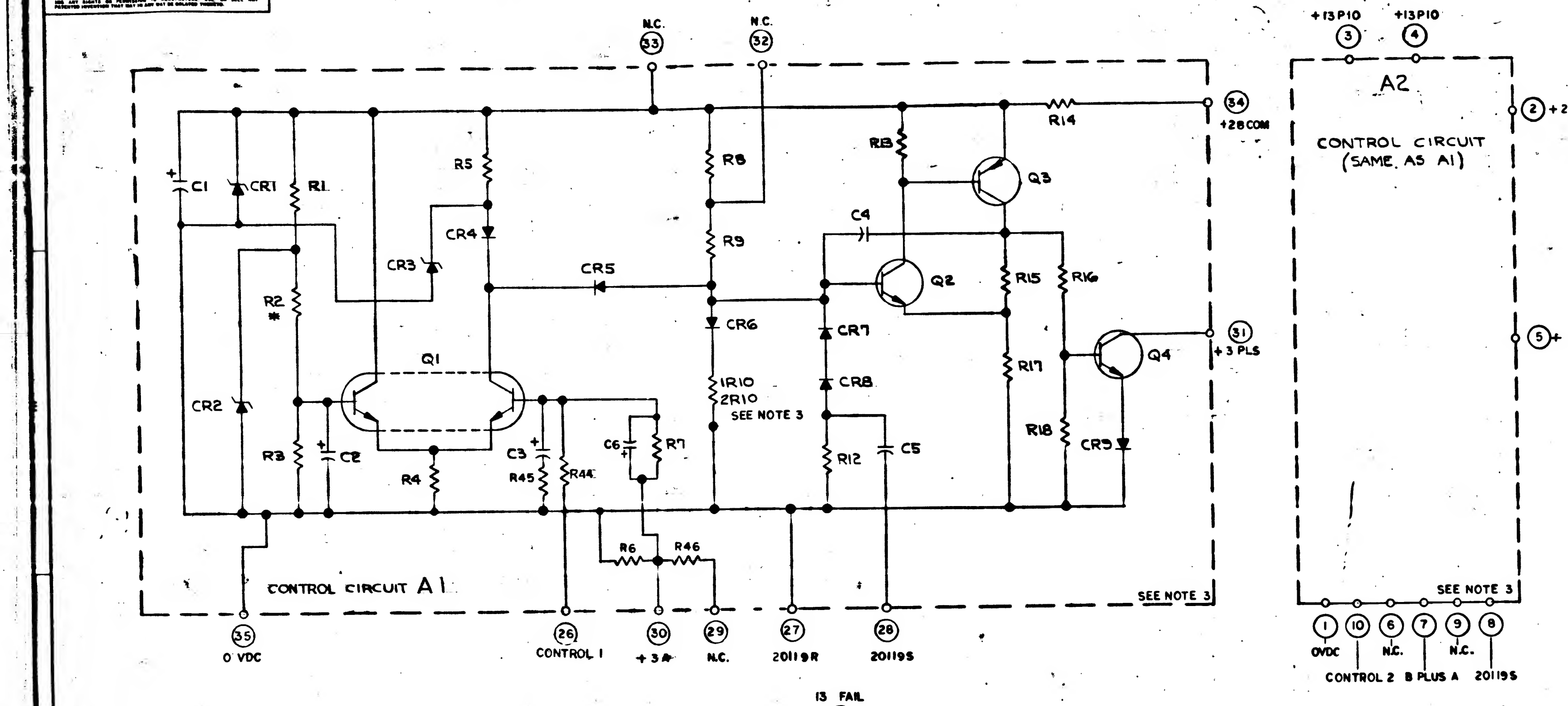
CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006098
SCALE — WT — SHEET 1 OF 1

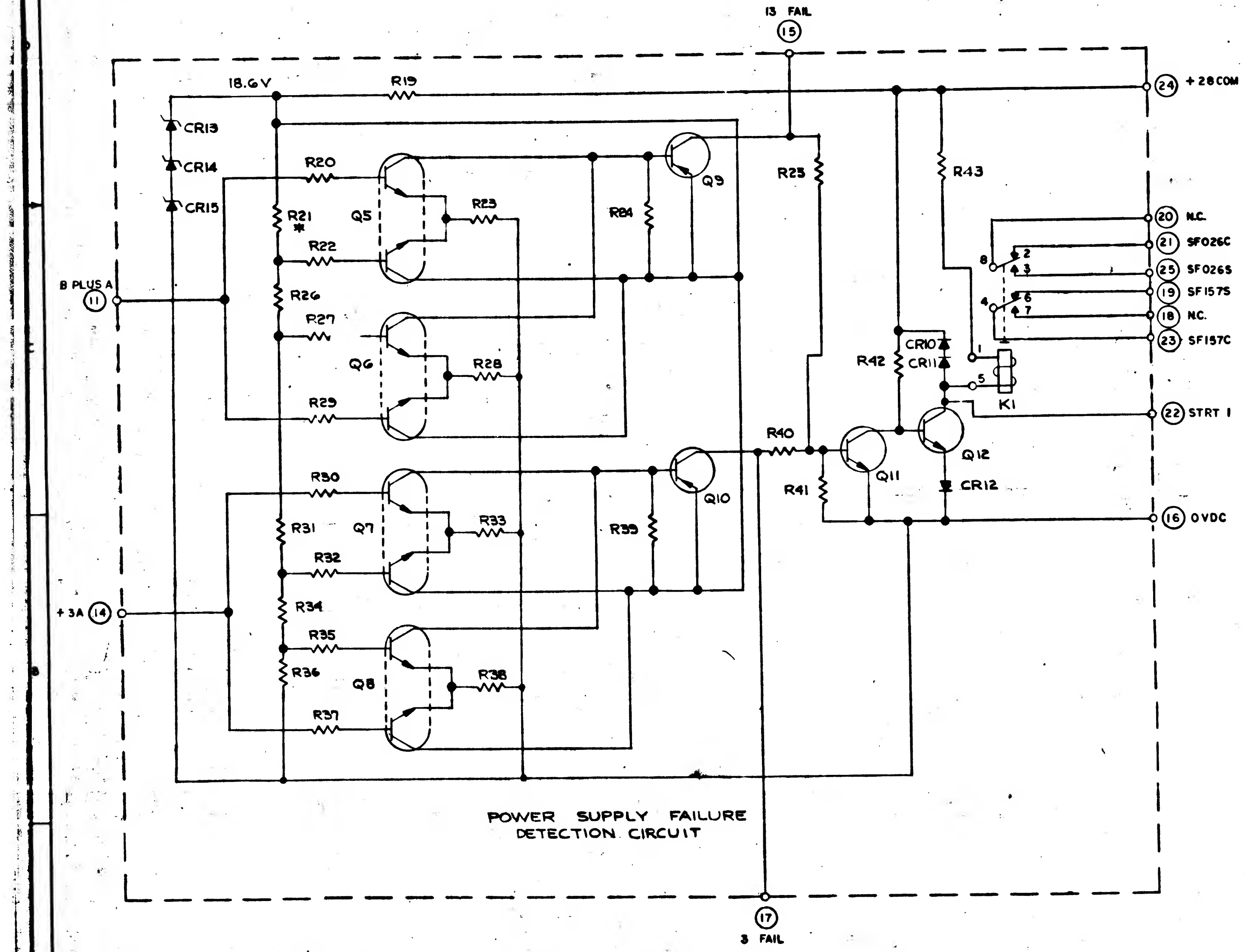
1006098 D

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01248	6-4-63	
B	REVISED PER TDRR 01488	6-4-63	
C	REVISED PER TDRR 02050		
D	REVISED PER TDRR 03136	9-12-63	
E	REVISED PER TDRR 03463		

REVISIONS CLASS B TDRR 009





REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755-134	CAP.	22 UF		
C2	1006755-26	CAP.	1.2 UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793-30	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-24	RES	470Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
1 R10	1006750-56	RES	10K Ω	2%	1/4 W
2 R10	1006750-70	RES	39KΩ	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω	1%	3W
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-29	RES	750Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21 *	1006750	RES	NE	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-27	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-44	RES	3300Ω	2%	1/4 W
R42	1006760-56	RES	10KΩ	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-36	RES	1500Ω	2%	1/4 W

SEE NOTE 3 (1 R10, 2 R10)

TABLE 1

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

NOTES:

* 1. NOMINAL VALUE, TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1
2. N.C. INDICATES NO CONNECTION
3. PREFIX 1 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A1. PREFIX 2 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A2. WHERE NO PREFIX IS SHOWN THE VALUE APPLIES TO BOTH CIRCUITS.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1003150	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
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MIT
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CAMBRIDGE, MASS

DRAWN
DATE
CHECKED
APPROVAL E. Augen 4/23/63
APPROVAL
NASA APPROVAL 4/29/63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CONTROL MODULE AGC POWER SUPPLY

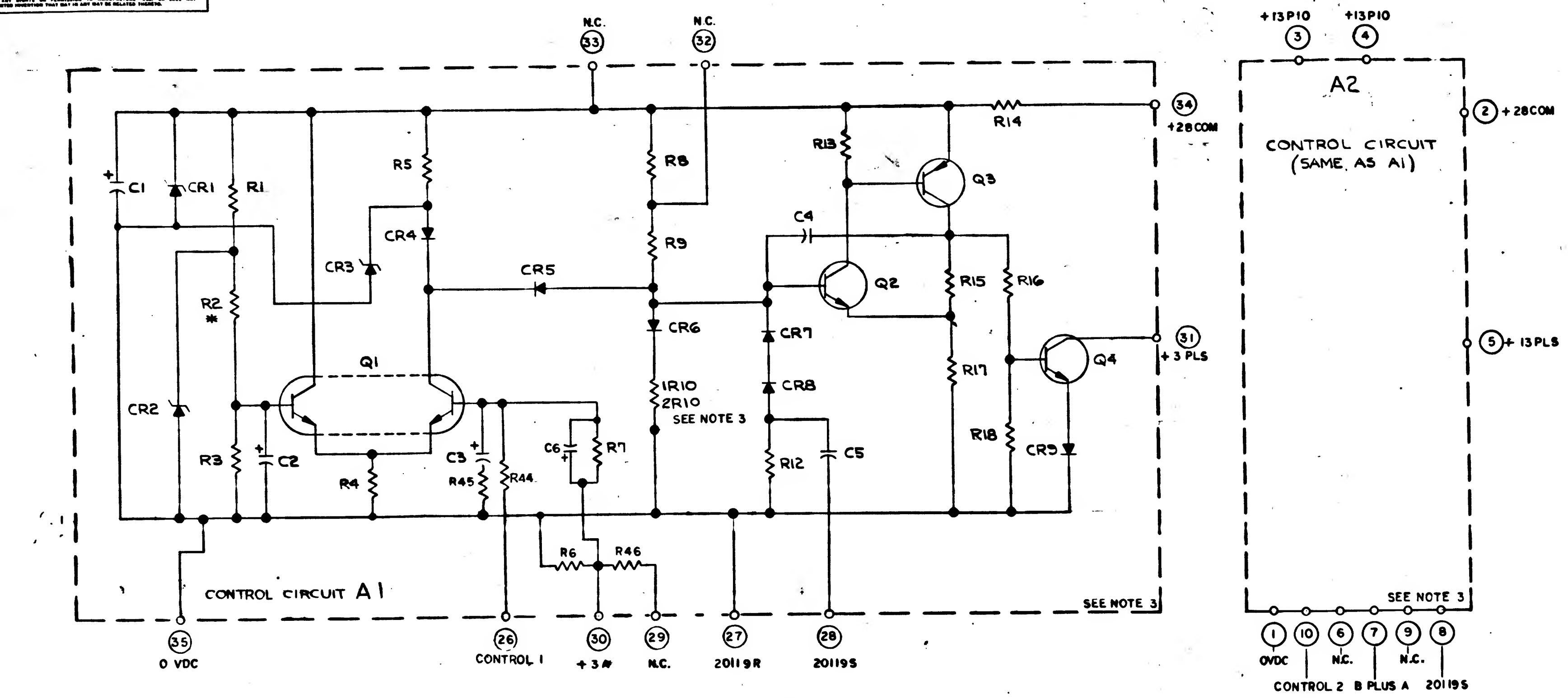
CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006098
SCALE —
WT —
SHEET 1 OF 1

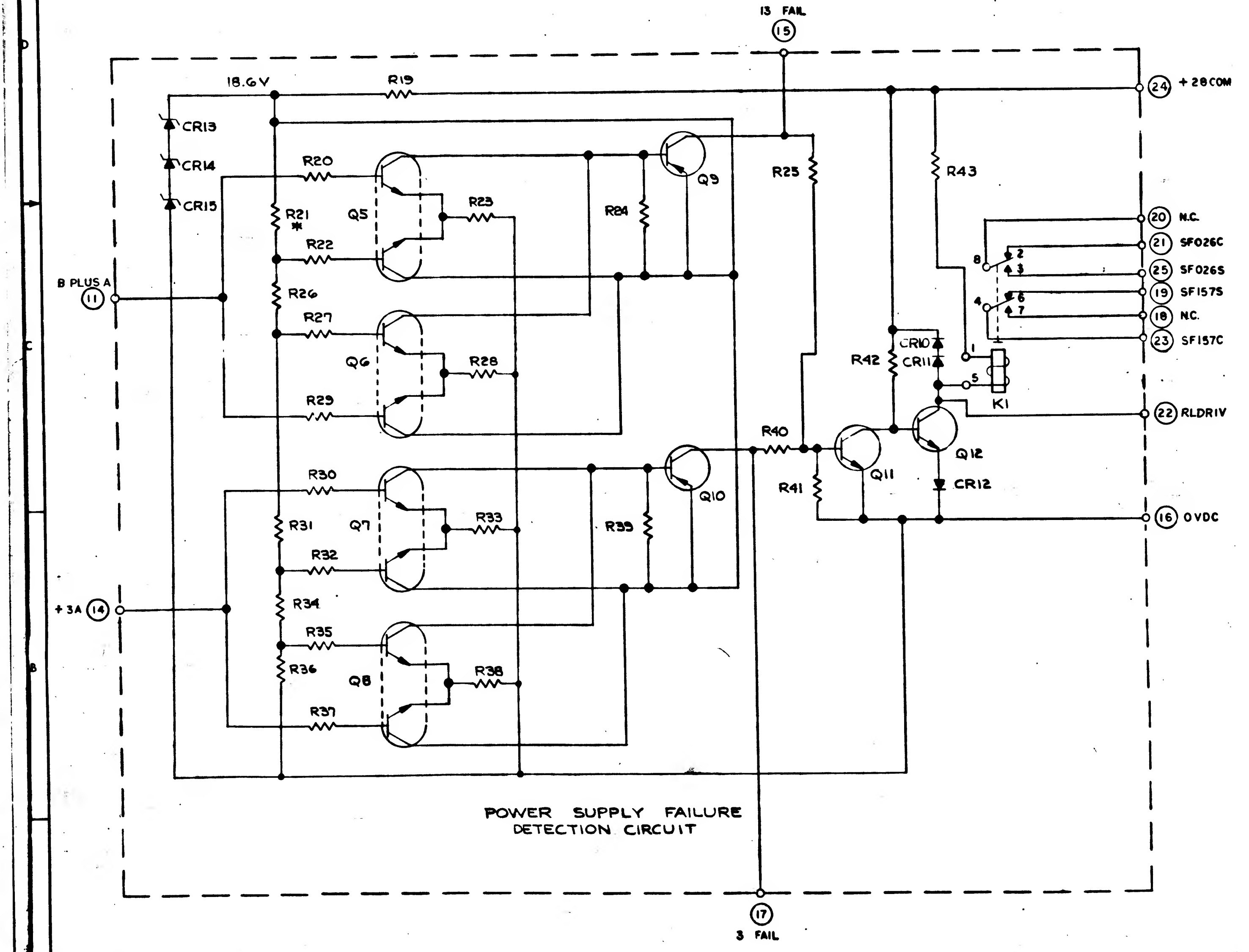
1006098 E

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01249	6-4-63	
B	REVISED PER TDRR 01458	6-4-63	
C	REVISED PER TDRR 02050	7-1-63	
D	REVISED PER TDRR 03135	9-18-63	
E	REVISED PER TDRR 03463	9-26-63	
F	REVISED PER TDRR 04036	10-17-63	

REVISIONS CLASS B TDRR 209





NOTES:

- * 1. NOMINAL VALUE, TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1
- 2. N.C. INDICATES NO CONNECTION
- 3. PREFIX 1 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A1. PREFIX 2 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A2. WHERE NO PREFIX IS SHOWN THE VALUE APPLIES TO BOTH CIRCUITS.

TABLE 1

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755-134	CAP.	22 UF		
C2	1006755-26	CAP.	1.2UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793-30	CAP.	.0056UF		
C5	1006777-24	CAP.	.001UF		
C6	1006755-57	CAP	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-22	RES	390Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
1 R10	1006750-56	RES	10K Ω	2%	1/4 W
2 R10	1006750-70	RES	39K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389-43	RES	300Ω	1%	3W
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-24	RES	470Ω	2%	1/4 W
R19	1006760-28	RES	680Ω	2%	1/2 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21 *	1006750	RES	NE	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-39	RES	2000Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-42	RES	2700Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-25	RES	510Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-32	RES	1000Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-43	RES	3000Ω	2%	1/4 W
R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-35	RES	1300Ω	2%	1/4 W

SEE NOTE 3

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
1003150	

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN DATE
CHECKED
APPROVAL E. Auger 4/23/63
APPROVAL
NASA APPROVAL 4/24/63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
CONTROL MODULE AGC POWER SUPPLY

CODE IDENT NO —
SIZE E
NASA DRAWING NO. 1006098
SCALE — WT — SHEET 1 OF 1

MASTER

1006098

INCHES
PHOTOGRAPHIC SCALE ONLY

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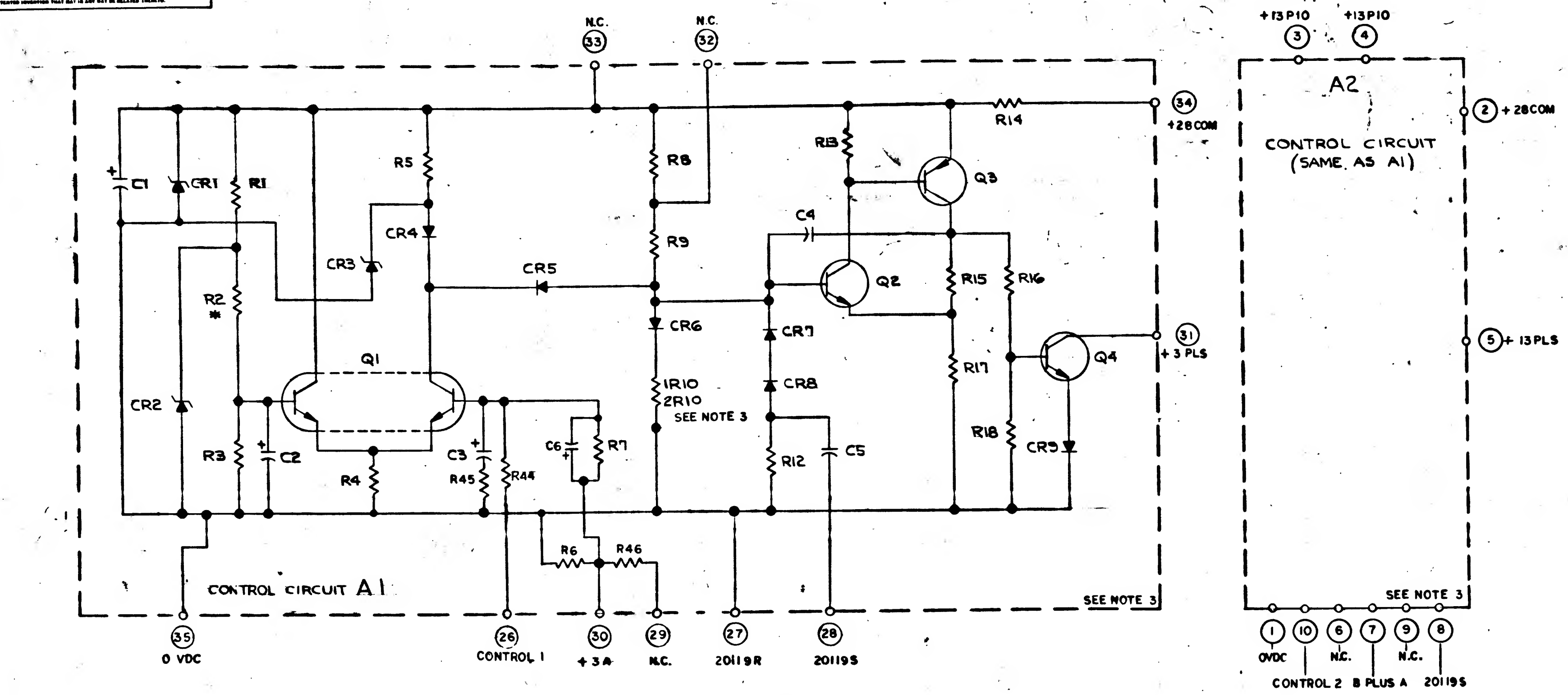

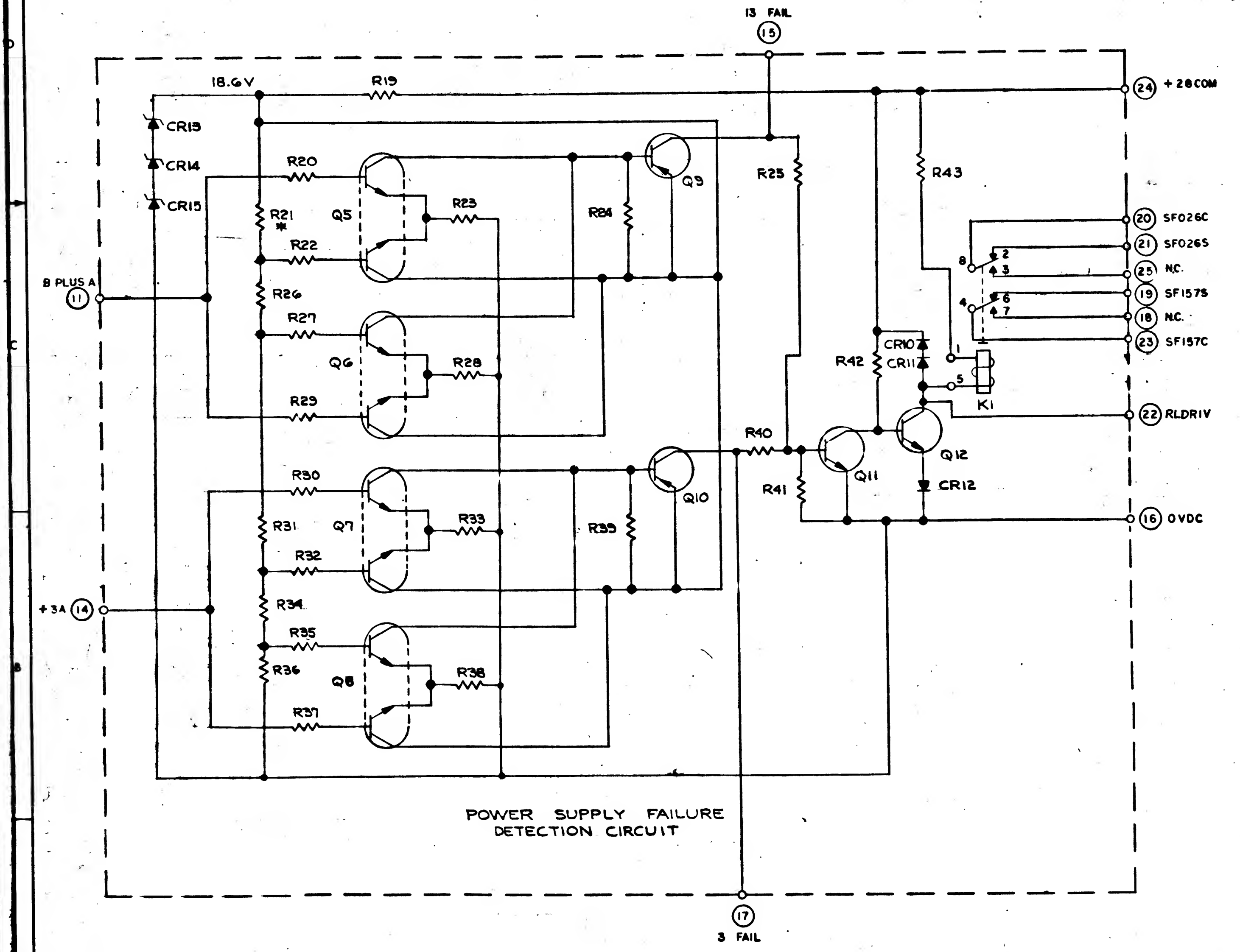

REVISIONS CLASS B TDRR 009

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01249	6-4-63	[illegible]
B	REVISED PER TDRR 01488	6-4-63	[illegible]
C	REVISED PER TDRR 02050	7-11-63	[illegible]
D	REVISED PER TDRR 03135	9-12-63	[illegible]
E	REVISED PER TDRR 03463	9-26-63	[illegible]
F	REVISED PER TDRR 04036	10-17-63	[illegible]
G	REVISED PER TDRR 05642	7-64	[illegible]

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755-134	CAP.	22 UF		
C2	1006755-26	CAP.	1.2UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793-30	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP.	0.1UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4W
R3	1006750-39	RES	2000Ω	2%	1/4W
R4	1006750-24	RES	470Ω	2%	1/4W
R5	1006750-24	RES	470Ω	2%	1/4W
R6	1006750-22	RES	390Ω	2%	1/4W
R7	1006750-43	RES	3000Ω	2%	1/4W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
1 R10	1006750-56	RES	10K Ω	2%	1/4 W
2 R10	1006750-70	RES	39KΩ	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4W
R13	1006750-32	RES	1000Ω	2%	1/4W
R14	1010389-43	RES	300Ω	1%	3W
R15	1006750-15	RES	200Ω	2%	1/4W
R16	1006750-22	RES	390Ω	2%	1/4W
R17	1006750-28	RES	680Ω	2%	1/4W
R18	1006750-24	RES	470Ω	2%	1/4W
R19	1006760-28	RES	680Ω	2%	1/2W
R20	1006750-56	RES	10K Ω	2%	1/4W
R21 *	1006750	RES	NE	2%	1/4W
R22	1006750-56	RES	10KΩ	2%	1/4W
R23	1006750-75	RES	62K Ω	2%	1/4W
R24	1006750-56	RES	10K Ω	2%	1/4W
R25	1006750-62	RES	18KΩ	2%	1/4W
R26	1006750-39	RES	2000Ω	2%	1/4W
R27	1006750-56	RES	10K Ω	2%	1/4W
R28	1006750-75	RES	62K Ω	2%	1/4W
R29	1006750-56	RES	10K Ω	2%	1/4W
R30	1006750-56	RES	10 K Ω	2%	1/4 W
R31	1006750-42	RES	2700Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-25	RES	510Ω	2%	1/4W
R35	1006750-56	RES	10KΩ	2%	1/4W
R36	1006750-32	RES	1000Ω	2%	1/4 W
R37	1006750-56	RES	10KΩ	2%	1/4W
R38	1006750-56	RES	10K Ω	2%	1/4W
R39	1006750-56	RES	10KΩ	2%	1/4W
R40	1006750-62	RES	18K Ω	2%	1/4W
R41	1006750-43	RES	3000Ω	2%	1/4W
R42	1006760-56	RES	10KΩ	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-35	RES	1300Ω	2%	1/4W

SEE NOTE 3 — 1 R10, 2 R10

TABLE 1.

PART NO	VALUE
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

NOTES:

* 1. NOMINAL VALUE, TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1

2. N.C. INDICATES NO CONNECTION

3. PREFIX 1 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A1.
PREFIX 2 ON SYMBOL NUMBERS REFERS TO CONTROL CIRCUIT A2.
WHERE NO PREFIX IS SHOWN THE VALUE APPLIES TO BOTH CIRCUITS.

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

1003150	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN [illegible] DATE [illegible]
CHECKED
APPROVAL E. Augen 4/23/63
APPROVAL [illegible]
NASA APPROVAL [illegible] 4/24/63
MIT APPROVAL [illegible]

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, CONTROL MODULE AGC POWER SUPPLY

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006098
SCALE —
WT —
SHEET 1 OF 1

1006098 G

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REVISIONS CLASS B [illegible]

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A RELEASE PER TDRR 01249	6-4-63	
B	REVISED PER TDRR 01458	6-4-63	
C	REVISED PER TDRR 02050	7-1-63	
D	REVISED PER TDRR 03136	9-18-63	
E	REVISED PER TDRR 03463	2-26-63	
F	REVISED PER TDRR 04036	10-17-63	
G	REVISED PER TDRR 05642	7 Jan 64	
H	REVISED PER TDRR 07268 DR CHK APPD	16 Jan 64	

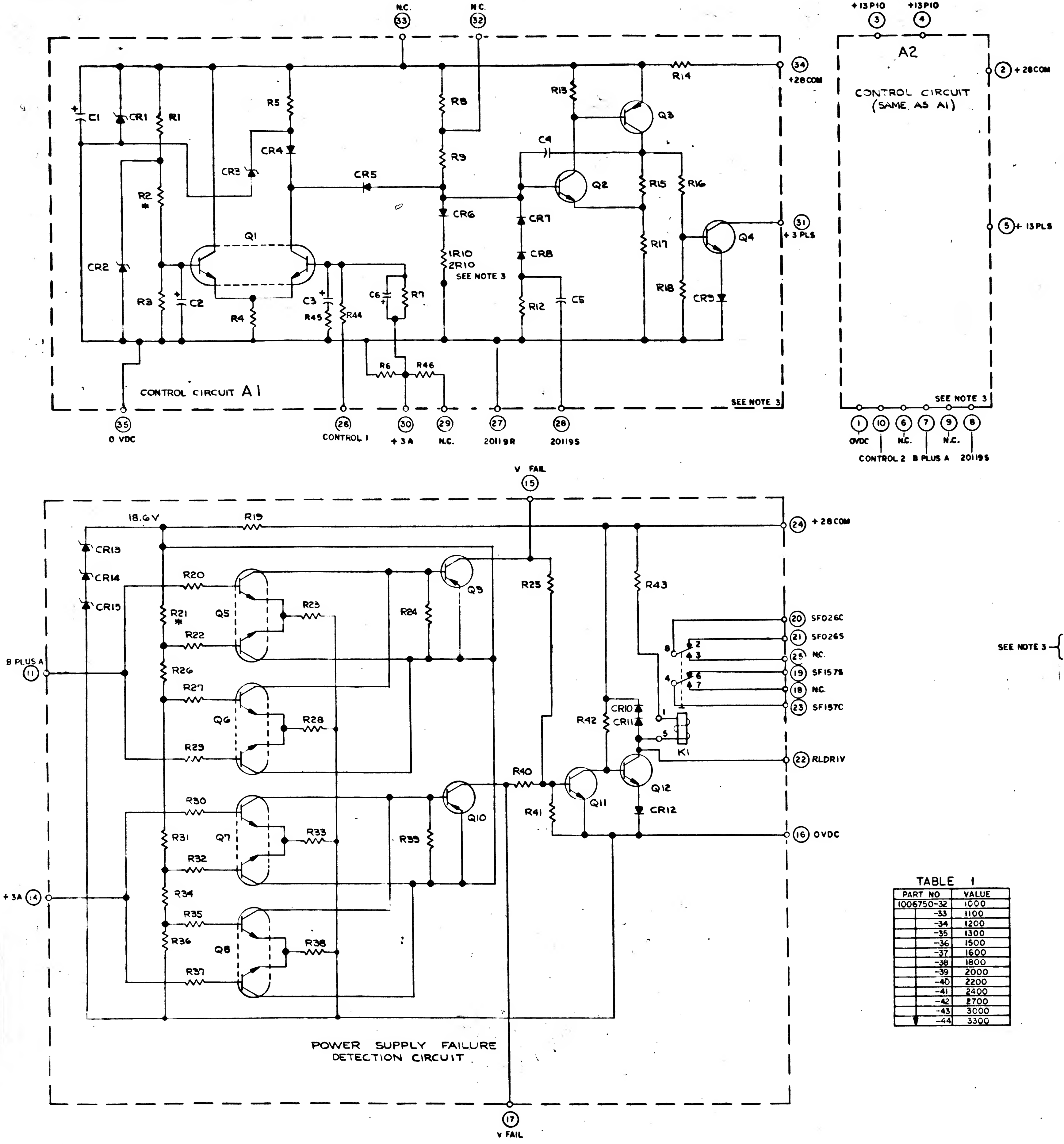

TABLE 1

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1006750-32	1000
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-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300

SEE NOTE 3 (1 R10, 2R10)

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006755-134	CAP.	22 UF		
C2	1006755-26	CAP.	1.2 UF		
C3	1006755-64	CAP.	0.39UF		
C4	1006793-30	CAP.	.0056UF		
C5	1006777-24	CAP.	.001 UF		
C6	1006755-57	CAP.	0.1 UF		
CR1	1006701	DIODE	10V	5%	
CR2	1006838	DIODE	6.2V		
CR3	1006838	DIODE	6.2V		
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1006838	DIODE	6.2V		
CR14	1006838	DIODE	6.2V		
CR15	1006838	DIODE	6.2V		
K1	1006815-2	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006752	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006829	TSTR			
Q10	1006829	TSTR			
Q11	1006752	TSTR			
Q12	1006752	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2 *	1006750	RES	NE	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-22	RES	390Ω	2%	1/4 W
R7	1006750-43	RES	3000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
1 R10	1006750-56	RES	10K Ω	2%	1/4 W
2R10	1006750-70	RES	39KΩ	2%	1/4 W
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R24	1006750-56	RES	10K Ω	2%	1/4 W
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R34	1006750-25	RES	510Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-32	RES	1000Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
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R42	1006760-56	RES	10K Ω	2%	1/2 W
R43	1006760-32	RES	1000Ω	2%	1/2 W
R44	106750-32	RES	1000Ω	2%	1/4 W
R45	1006750-15	RES.	200Ω	2%	1/4 W
R46	1006750-35	RES	1300Ω	2%	1/4W

NOTES:

* 1. NOMINAL VALUE, TO BE DETERMINED AT TEST, AS SELECTED FROM TABLE 1

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QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
1003150	
APPLICATION	

UNLESS OTHERWISE SPECIFIED
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TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE
CHECKED
APPROVAL E. Angen 4/23/63
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

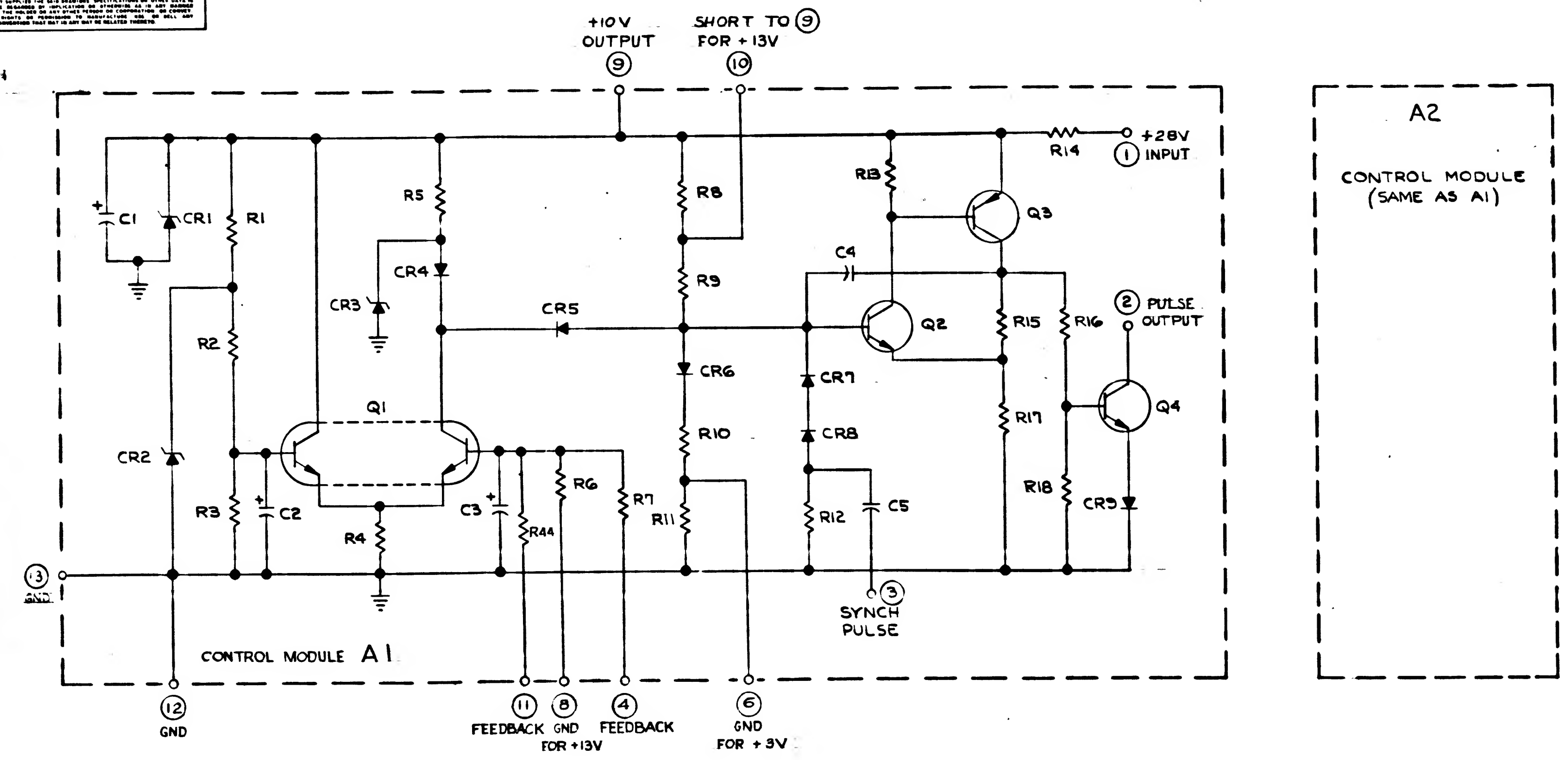
SCHEMATIC, CONTROL MODULE AGC POWER SUPPLY

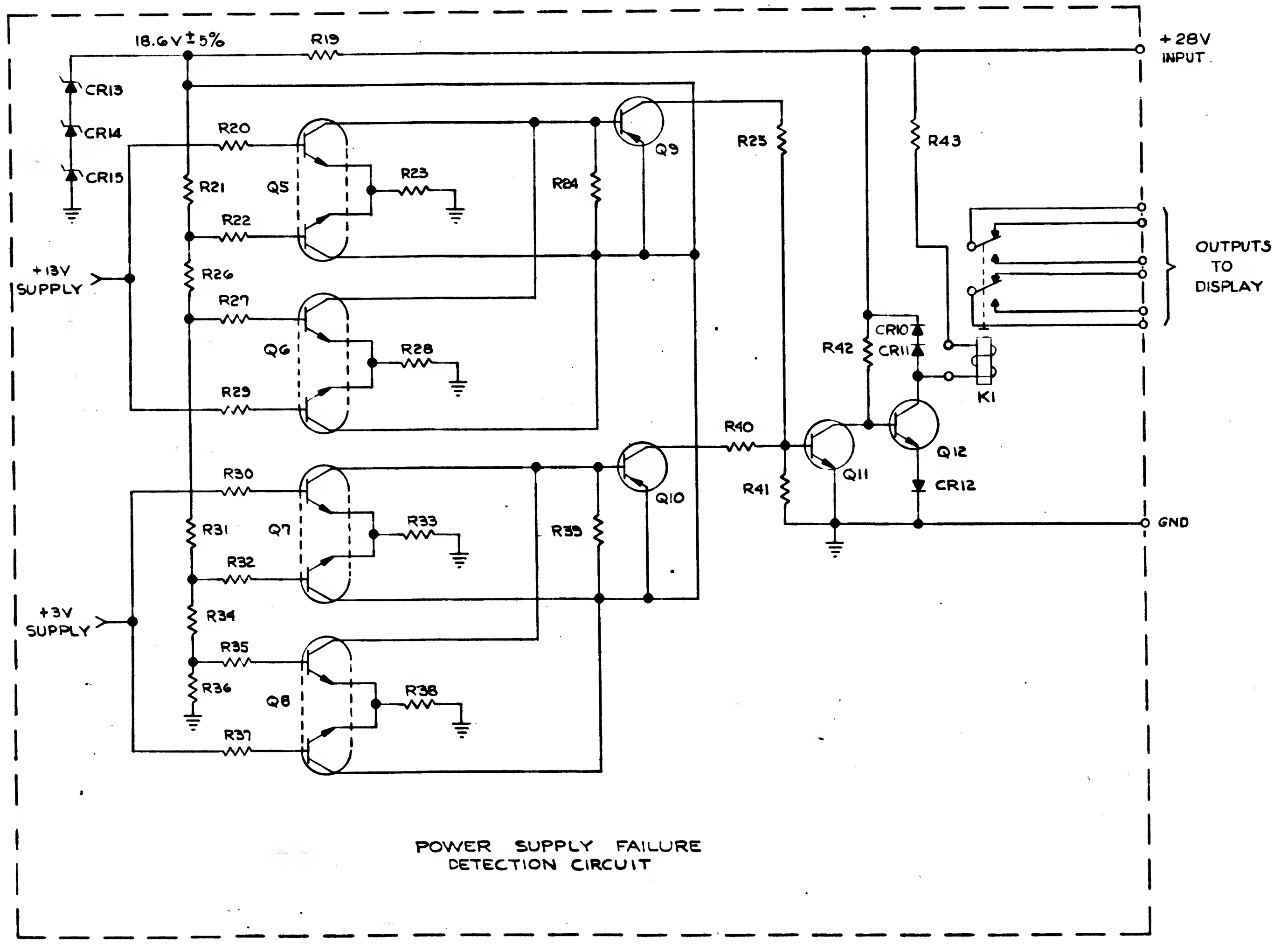
CODE IDENT NO. —
SIZE E
NASA DRAWING NO 1006098
SCALE —
WT —
SHEET 1 OF 1

1006098

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL





POWER SUPPLY FAILURE DETECTION CIRCUIT

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1010393	CAP.	22 UF		
C2	1006755-26	CAP.	1.2UF		
C3	1006755-26	CAP.	1.2UF		
C4	1006793-	CAP.	.0056UF		
C5	10067772-4	CAP.	.001UF		
CR1	1010290-	DIODE	10V	5%	
CR2	1010259	DIODE	6.2V	5%	
CR3	1010259	DIODE	6.2V	5%	
CR4	1006751	DIODE			
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	1006751	DIODE			
CR9	1006751	DIODE			
CR10	1006751	DIODE			
CR11	1006751	DIODE			
CR12	1006751	DIODE			
CR13	1010259	DIODE	6.2V	5%	
CR14	1010259	DIODE			
CR15	1010259	DIODE			
K1	1006815	RELAY			
Q1	1010376-1	TSTR			
Q2	1006752	TSTR			
Q3	1006753	TSTR			
Q4	1006759	TSTR			
Q5	1010376-1	TSTR			
Q6	1010376-1	TSTR			
Q7	1010376-1	TSTR			
Q8	1010376-1	TSTR			
Q9	1006804	TSTR			
Q10	1006804	TSTR			
Q11	1006759	TSTR			
Q12	1006759	TSTR			
R1	1006750-24	RES	470Ω	2%	1/4 W
R2	1006750-39	RES	2000Ω	2%	1/4 W
R3	1006750-39	RES	2000Ω	2%	1/4 W
R4	1006750-24	RES	470Ω	2%	1/4 W
R5	1006750-24	RES	470Ω	2%	1/4 W
R6	1006750-18	RES	270Ω	2%	1/4 W
R7	1006750-32	RES	1000Ω	2%	1/4 W
R8	1006750-50	RES	5600Ω	2%	1/4 W
R9	1006750-60	RES	15K Ω	2%	1/4 W
R10	1006750-55	RES	9100Ω	2%	1/4 W
R11	1006750-64	RES	22K Ω	2%	1/4 W
R12	1006750-32	RES	1000Ω	2%	1/4 W
R13	1006750-32	RES	1000Ω	2%	1/4 W
R14	1010389	RES	330Ω		
R15	1006750-15	RES	200Ω	2%	1/4 W
R16	1006750-22	RES	390Ω	2%	1/4 W
R17	1006750-28	RES	680Ω	2%	1/4 W
R18	1006750-12	RES	150Ω	2%	1/4 W
R19	1006750-29	RES	750Ω	2%	1/4 W
R20	1006750-56	RES	10K Ω	2%	1/4 W
R21	1006750-36	RES	1500Ω	2%	1/4 W
R22	1006750-56	RES	10K Ω	2%	1/4 W
R23	1006750-75	RES	62K Ω	2%	1/4 W
R24	1006750-56	RES	10K Ω	2%	1/4 W
R25	1006750-62	RES	18K Ω	2%	1/4 W
R26	1006750-42	RES	2700Ω	2%	1/4 W
R27	1006750-56	RES	10K Ω	2%	1/4 W
R28	1006750-75	RES	62K Ω	2%	1/4 W
R29	1006750-56	RES	10K Ω	2%	1/4 W
R30	1006750-56	RES	10K Ω	2%	1/4 W
R31	1006750-44	RES	3300Ω	2%	1/4 W
R32	1006750-56	RES	10K Ω	2%	1/4 W
R33	1006750-56	RES	10K Ω	2%	1/4 W
R34	1006750-27	RES	620Ω	2%	1/4 W
R35	1006750-56	RES	10K Ω	2%	1/4 W
R36	1006750-34	RES	1200Ω	2%	1/4 W
R37	1006750-56	RES	10K Ω	2%	1/4 W
R38	1006750-56	RES	10K Ω	2%	1/4 W
R39	1006750-56	RES	10K Ω	2%	1/4 W
R40	1006750-62	RES	18K Ω	2%	1/4 W
R41	1006750-43	RES	3000Ω	2%	1/4 W
R42	1006750-59	RES	13K Ω	2%	1/4 W
R43	1006750-27	RES	620Ω	2%	1/4 W
R44	106750-32	RES	1000Ω	2%	1/4 W

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 00954 DATE 24 Apr 63

1006098

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL E. Auger 4/23/63
APPROVAL
NASA APPROVAL 4/26/63
MIT APPROVAL 24 Apr 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

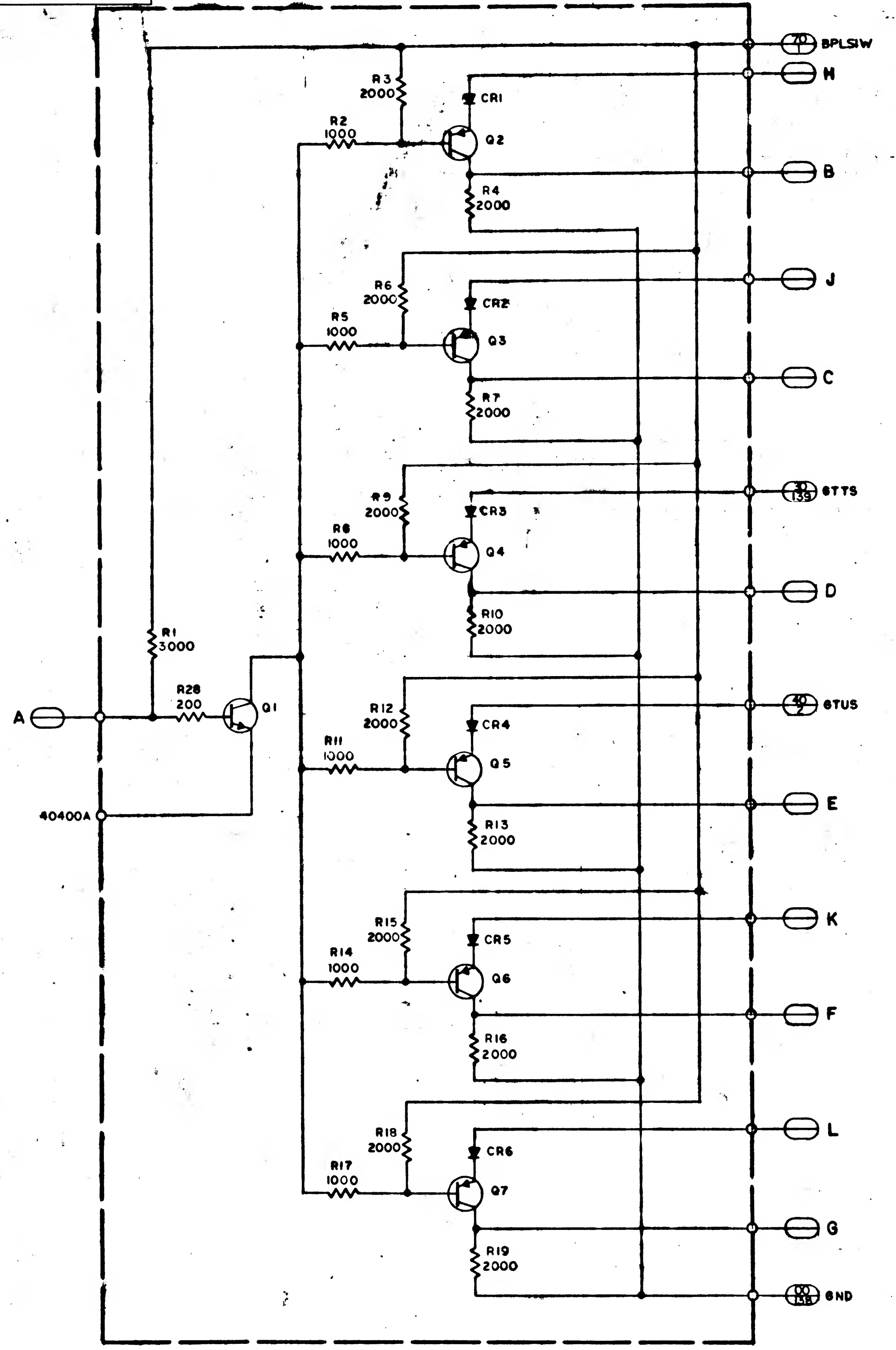
CONTROL STICK
A.G.C. SWITCHING REGULATOR

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006098
SCALE WT SHEET 1 OF 1

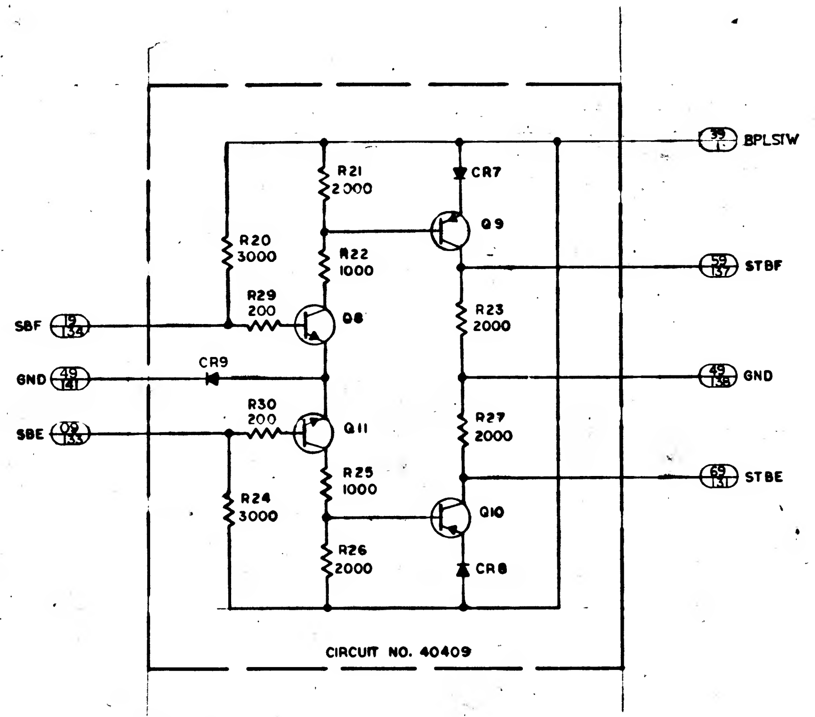
MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

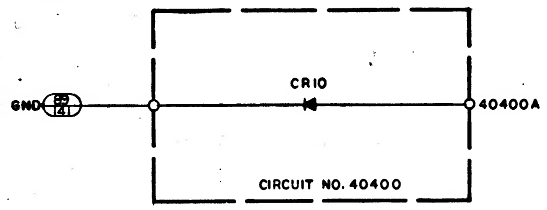
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED & UPGRADED TO CLASS A PEP TDRR 02549		



8 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40401
THRU 40408



CIRCUIT NO. 40409



CIRCUIT NO. 40400

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750-43	RESISTOR	3000	2%	1/4 W	40401 THRU 40408
R2	1006750-32		1000			
R3	1006750-39		2000			
R4	1006750-39		2000			
R5	1006750-32		1000			
R6	1006750-39		2000			
R7	1006750-39		2000			
R8	1006750-32		1000			
R9	1006750-39		2000			
R10	1006750-39		2000			
R11	1006750-32		1000			
R12	1006750-39		2000			
R13	1006750-39		2000			
R14	1006750-32		1000			
R15	1006750-39		2000			
R16	1006750-39		2000			
R17	1006750-32		1000			
R18	1006750-39		2000			
R19	1006750-39		2000			
R20	1006750-43		3000			40409
R21	1006750-39		2000			
R22	1006750-32		1000			
R23	1006750-39		2000			
R24	1006750-43		3000			
R25	1006750-32		1000			
R26	1006750-39		2000			
R27	1006750-39		2000			
R28	1006750-15		200			40401 THRU 40408
R29	1006750-15		200			40409
R30	1006750-15		200			40409
CR1	1006751	DIODE				40401 THRU 40408
CR2						
CR3						
CR4						
CR5						
CR6						40401 THRU 40408
CR7						40409
CR8						40409
CR9						40409
CR10						40400
Q1	1006752	TRANSISTOR				40401 THRU 40408
Q2	1006753					
Q3						
Q4						
Q5						
Q6						
Q7	1006753					40401 THRU 40408
Q8	1006752					40409
Q9	1006753					
Q10	1006753					
Q11	1006752					

01967

CIRCUIT NO.	A			B			C			D			E			F			G		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40401	SD00	21	3	SDR00	11	6	SDR01	01	7	SDR02	31	8	SDR03	41	5	SDR04	51	14	SDR05	61	15
40402	SD01	22	29	SDR06	12	22	SDR07	02	23	SDR08	32	24	SDR09	42	21	SDR10	52	30	SDR11	62	31
40403	SD02	23	45	SDR12	13	38	SDR13	03	39	SDR14	33	40	SDR15	43	37	SDR16	53	46	SDR17	63	47
40404	SD03	24	61	SDR18	14	54	SDR19	04	55	SDR20	34	56	SDR21	44	53	SDR22	54	62	SDR23	64	63
40405	SD04	25	77	SDR24	15	70	SDR25	05	71	SDR26	35	72	SDR27	45	69	SDR28	55	78	SDR29	65	79
40406	SD05	26	93	SDR30	16	86	SDR31	06	87	SDR32	36	88	SDR33	46	85	SDR34	56	94	SDR35	66	95
40407	SD06	27	109	SDR36	17	102	SDR37	07	103	SDR38	37	104	SDR39	47	101	SDR40	57	110	SDR41	67	111
40408	SD07	28	125	SDR42	18	118	SDR43	08	119	SDR44	38	120	SDR45	48	117	SDR46	58	126	SDR47	68	127

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

CIRCUIT NO.	H			J			K			L		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40401	6TRS	10	3	6TSS	20	10	6TVS	50	17	6TWS	60	18
40402			19			26			33			34
40403			35			42			49			50
40404			51			58			65			66
40405			67			74			81			82
40406			83			90			97			98
40407			99			106			113			114
40408			115			122			129			130

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
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FINAL FINISH —

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CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN A. Di Leo DATE 18 JUNE
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ROPE STRAND SELECT MODULE

CODE IDENT NO. SIZE E NASA DRAWING NO. 1006099
SCALE — WT — SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006099 A

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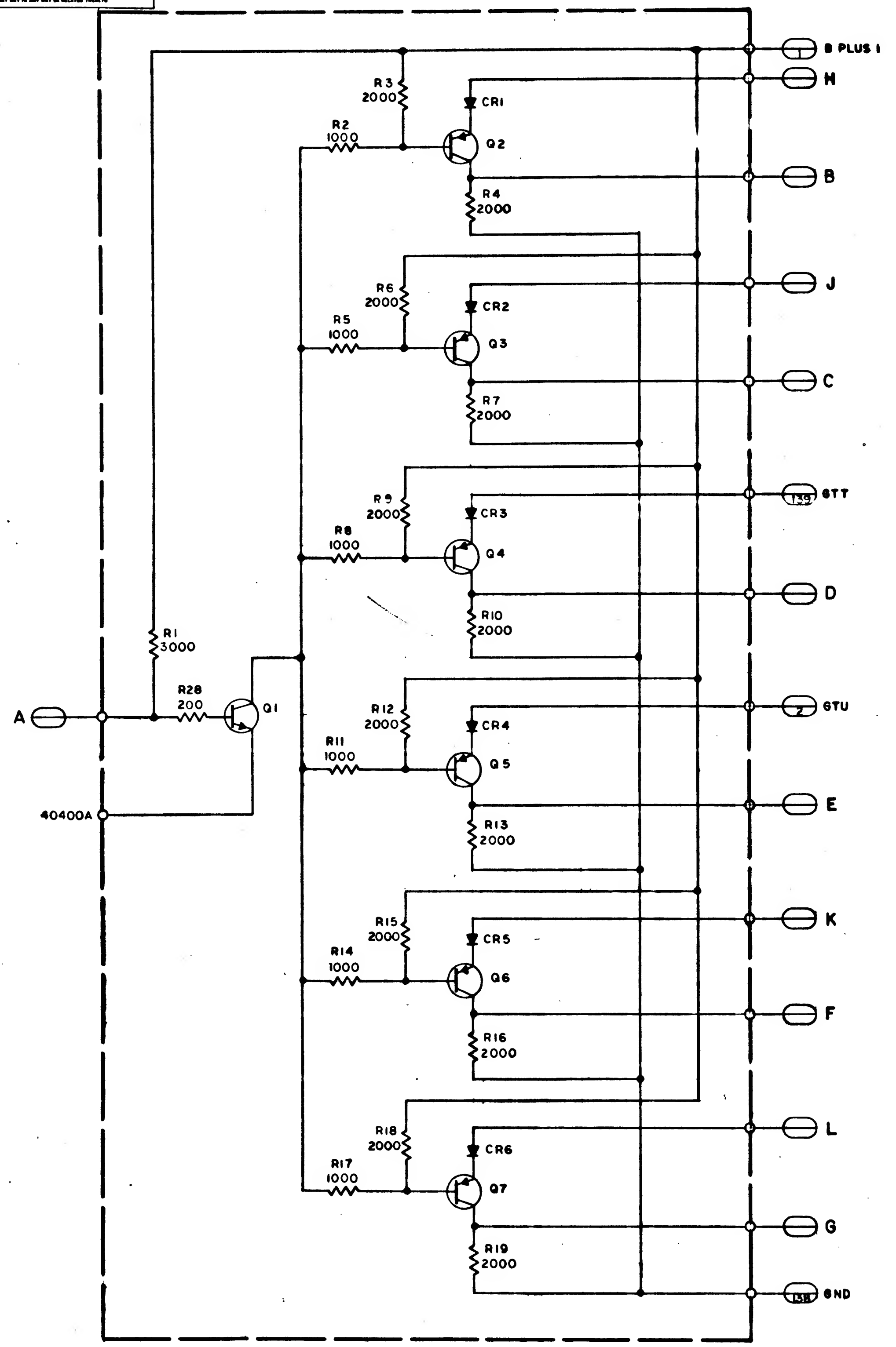
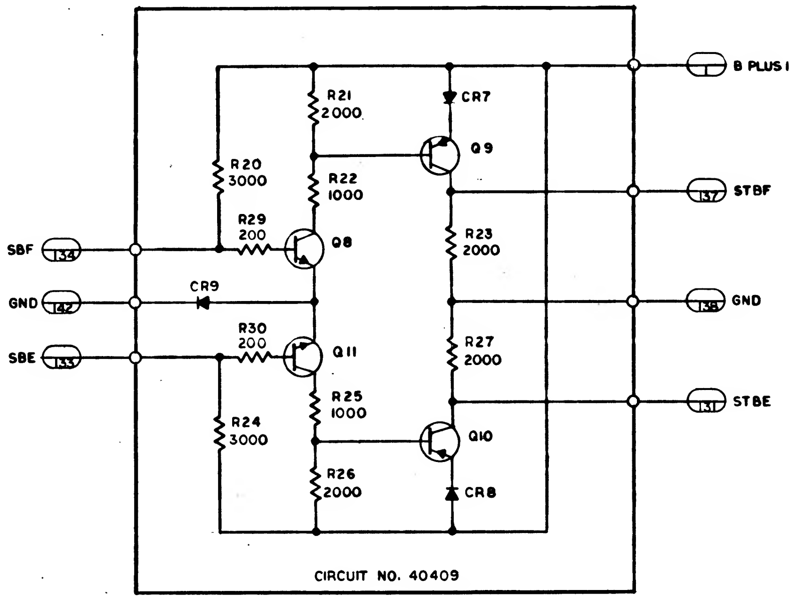
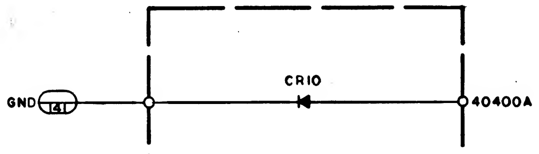
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



8 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40401
THRU 40408



CIRCUIT NO. 40409



CIRCUIT NO. 40400

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -43	RESISTOR	3000	2%	1/4 W	40401 THRU 40408
R2	1006750 -32		1000			
R3	1006750 -39		2000			
R4	1006750 -39		2000			
R5	1006750 -32		1000			
R6	1006750 -39		2000			
R7	1006750 -39		2000			
R8	1006750 -32		1000			
R9	1006750 -39		2000			
R10	1006750 -39		2000			
R11	1006750 -32		1000			
R12	1006750 -39		2000			
R13	1006750 -39		2000			
R14	1006750 -32		1000			
R15	1006750 -39		2000			
R16	1006750 -39		2000			
R17	1006750 -32		1000			
R18	1006750 -39		2000			
R19	1006750 -39		2000			↓
R20	1006750 -43		3000			40409
R21	1006750 -39		2000			
R22	1006750 -32		1000			
R23	1006750 -39		2000			
R24	1006750 -43		3000			
R25	1006750 -32		1000			
R26	1006750 -39		2000			
R27	1006750 -39		2000			↓
R28	1006750 -15		200			40401 THRU 40408
R29	1006750 -15		200			40409
R30	1006750 -15	↓	200	↓	↓	40409
CR1	1006751	DIODE				40401 THRU 40408
CR2						
CR3						
CR4						
CR5						↓
CR6						40401 THRU 40408
CR7						40409
CR8						40409
CR9						40409
CR10	↓	↓				40400
Q1	1006752	TRANSISTOR				40401 THRU 40408
Q2	1006753					
Q3						
Q4						
Q5						
Q6	↓					↓
Q7	1006753					40401 THRU 40408
Q8	1006752					
Q9	1006753					
Q10	1006753					
Q11	1006752	↓				↓

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 01967 DATE 7/9/64

CIRCUIT NO.	A			B			C			D			E			F			G		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40401	SD00		13	SDR00		6	SDR01		7	SDR02		8	SDR03		5	SDR04		14	SDR05		15
40402	SD01		29	SDR06		22	SDR07		23	SDR08		24	SDR09		21	SDR10		30	SDR11		31
40403	SD02		45	SDR12		38	SDR13		39	SDR14		40	SDR15		37	SDR16		46	SDR17		47
40404	SD03		61	SDR18		54	SDR19		55	SDR20		56	SDR21		53	SDR22		62	SDR23		63
40405	SD04		77	SDR24		70	SDR25		71	SDR26		72	SDR27		69	SDR28		78	SDR29		79
40406	SD05		93	SDR30		86	SDR31		87	SDR32		88	SDR33		85	SDR34		94	SDR35		95
40407	SD06		109	SDR36		102	SDR37		103	SDR38		104	SDR39		101	SDR40		110	SDR41		111
40408	SD07		125	SDR42		118	SDR43		119	SDR44		120	SDR45		117	SDR46		126	SDR47		127

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

CIRCUIT NO.	H			J			K			L		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40401	GTR		3	GTS		10	GTV		17	GTW		18
40402			19			26			33			34
40403			35			42			49			50
40404			51			58			65			66
40405			67			74			81			82
40406			83			90			97			98
40407			99			106			113			114
40408	↓		115	↓		122	↓		129	↓		130

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN A. B. Lee DATE 13 JUNE 64
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C Hall 10 July 64
NASA APPROVAL
MIT APPROVAL [illegible] 7/10/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ROPE STRAND
SELECT MODULE

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006099
SCALE —
WT —
SHEET 1 OF 1

1006099

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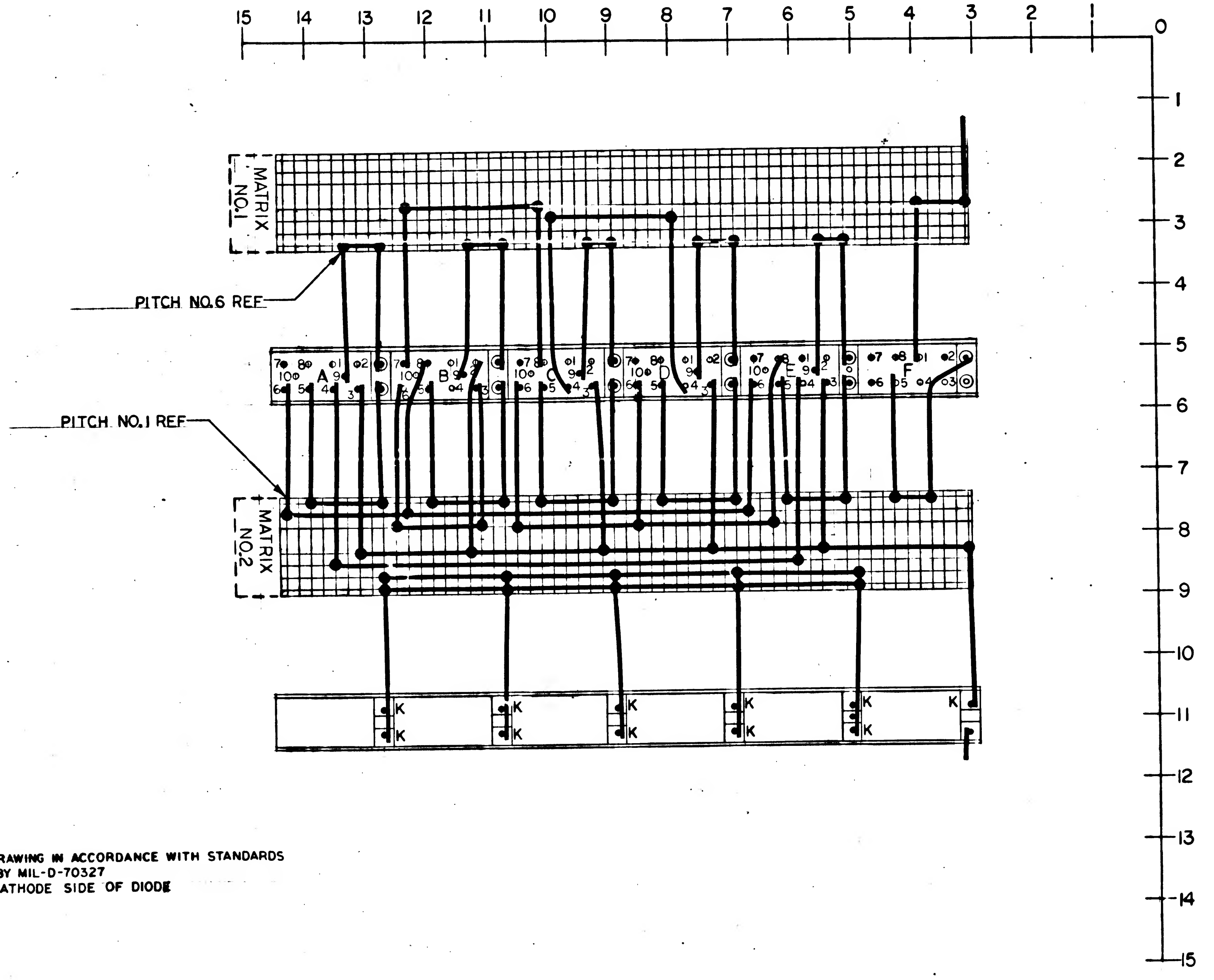
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02918	9/5/63	
A	REVISED PER TDRR 04737	11-15-65	



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO.
CONTRACT

DRAWN DATE
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL 9/5/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RELAY STICKS 1 AND 3
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006110
SCALE 2/1
WT
SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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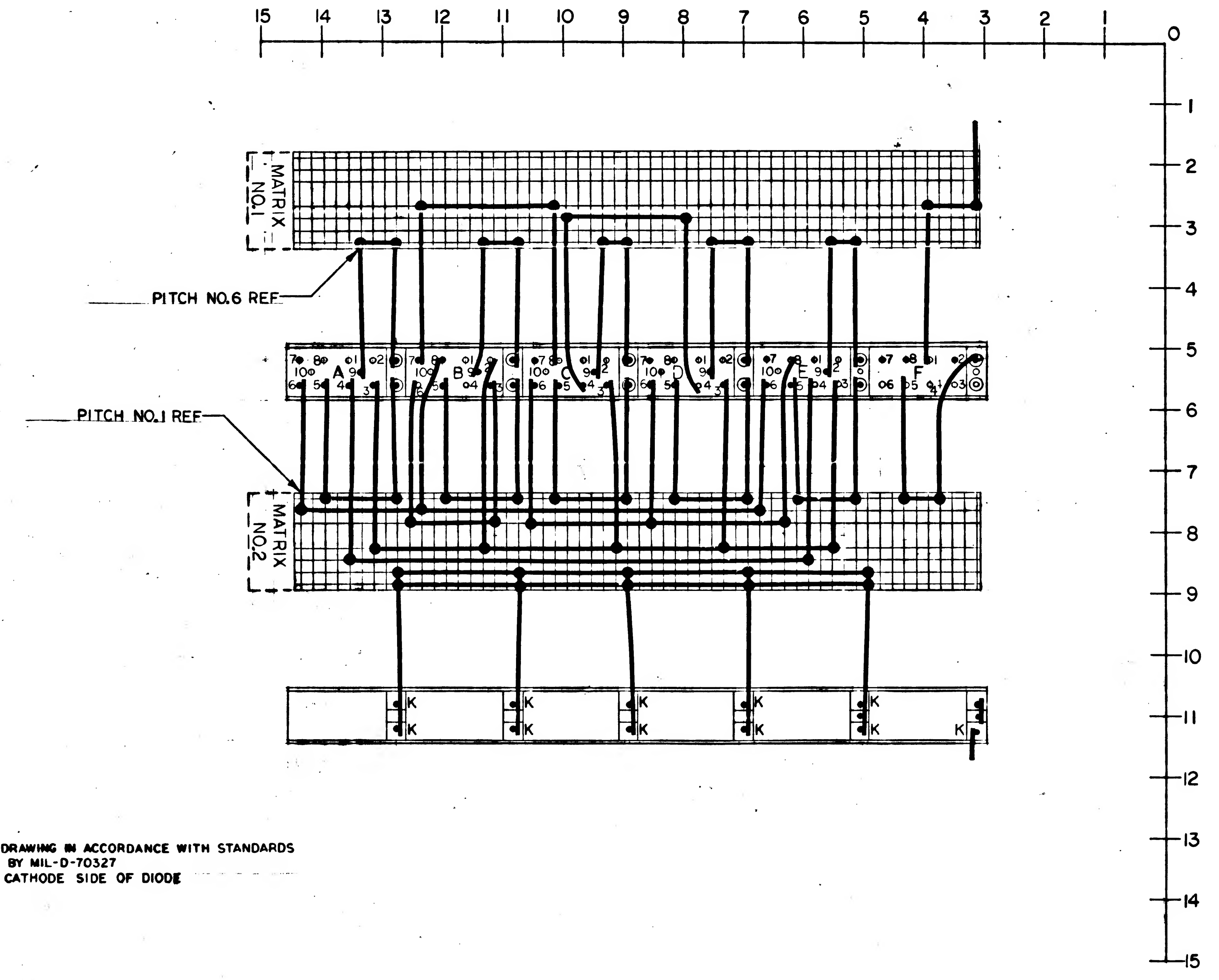
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02918	9/5/63	
A	REVISED PER TDRR 04737	11-15-63	
B	REVISED PER TDRR 06050	29 Jan 64	



REFERANCE DWG:
1. MECHANICAL ASSY — 1003521

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
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FRACTIONS ± DECIMALS ± ANGLES ±
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CAMBRIDGE, MASS.
DWG. NO.
CONTRACT
DRAWN DATE 21 AUG 63
CHECKED 26 Aug 63
APPROVAL
APPROVAL 5 Sep 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL 9/5/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RELAY STICKS 1 AND 3
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

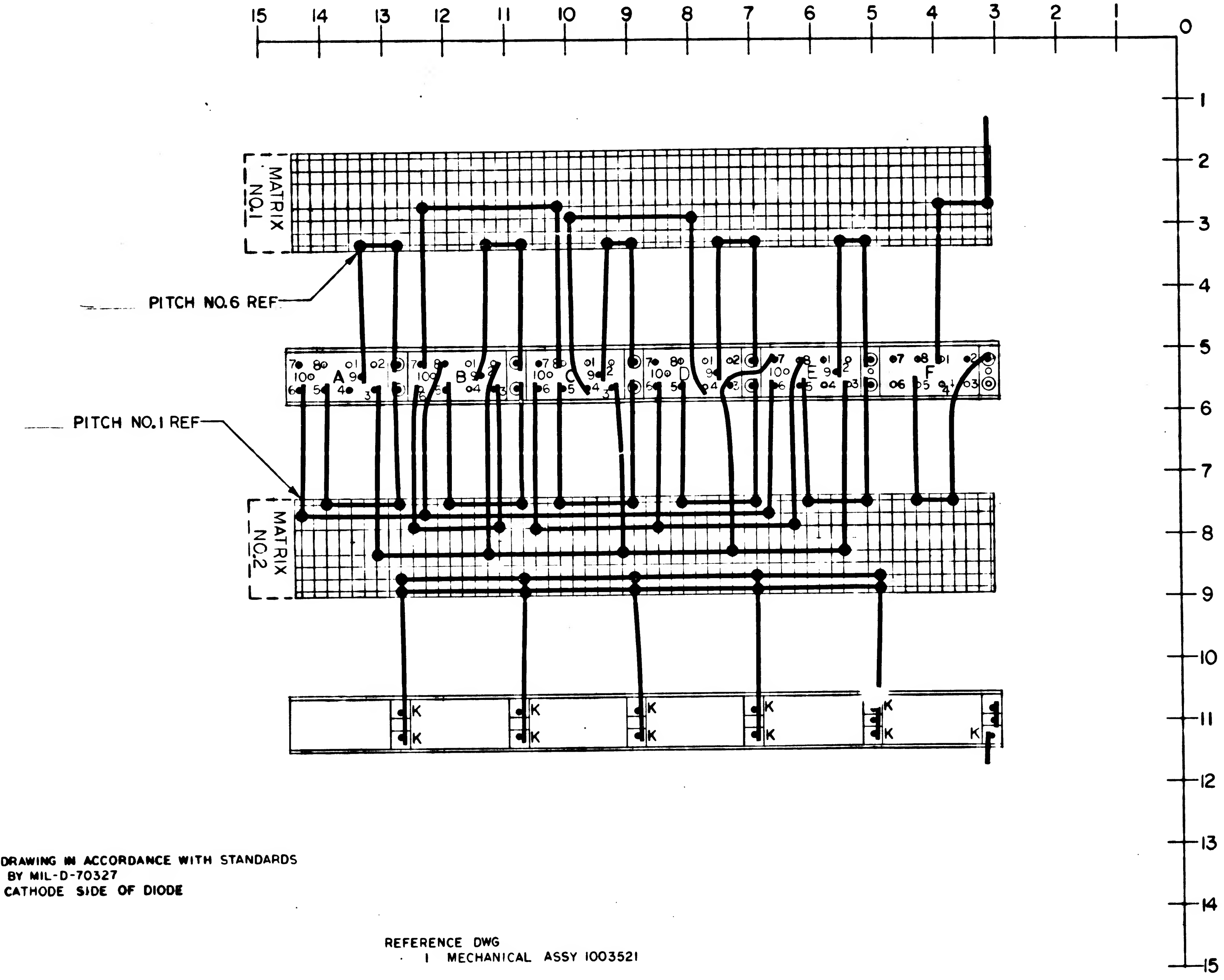
CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006110
SCALE 2/1
WT
SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02918	9/5/60	
A	REVISED PER TDRR 04739	11-19-63	
B	REVISED PER TDRR 06050		
C	REVISED PER TDRR 07347 DR B Jensen CHK	16 Mar 64	



REFERANCE DWG:
1. MECHANICAL ASSY — 1003521

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

REFERENCE DWG
1 MECHANICAL ASSY 1003521

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

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CAMBRIDGE, MASS
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APPROVAL
APPROVAL 5 Sep 63
NASA APPROVAL
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MIT APPROVAL 9/5/60

MANNED SPACECRAFT CENTER
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RELAY STICKS I AND 3
WIRING DIAGRAM
AGC DSKY, NAV/MAIN

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006110
SCALE 2/1
WT
SHEET 1 OF 1

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SYM	DESCRIPTION	DATE	APPROVAL
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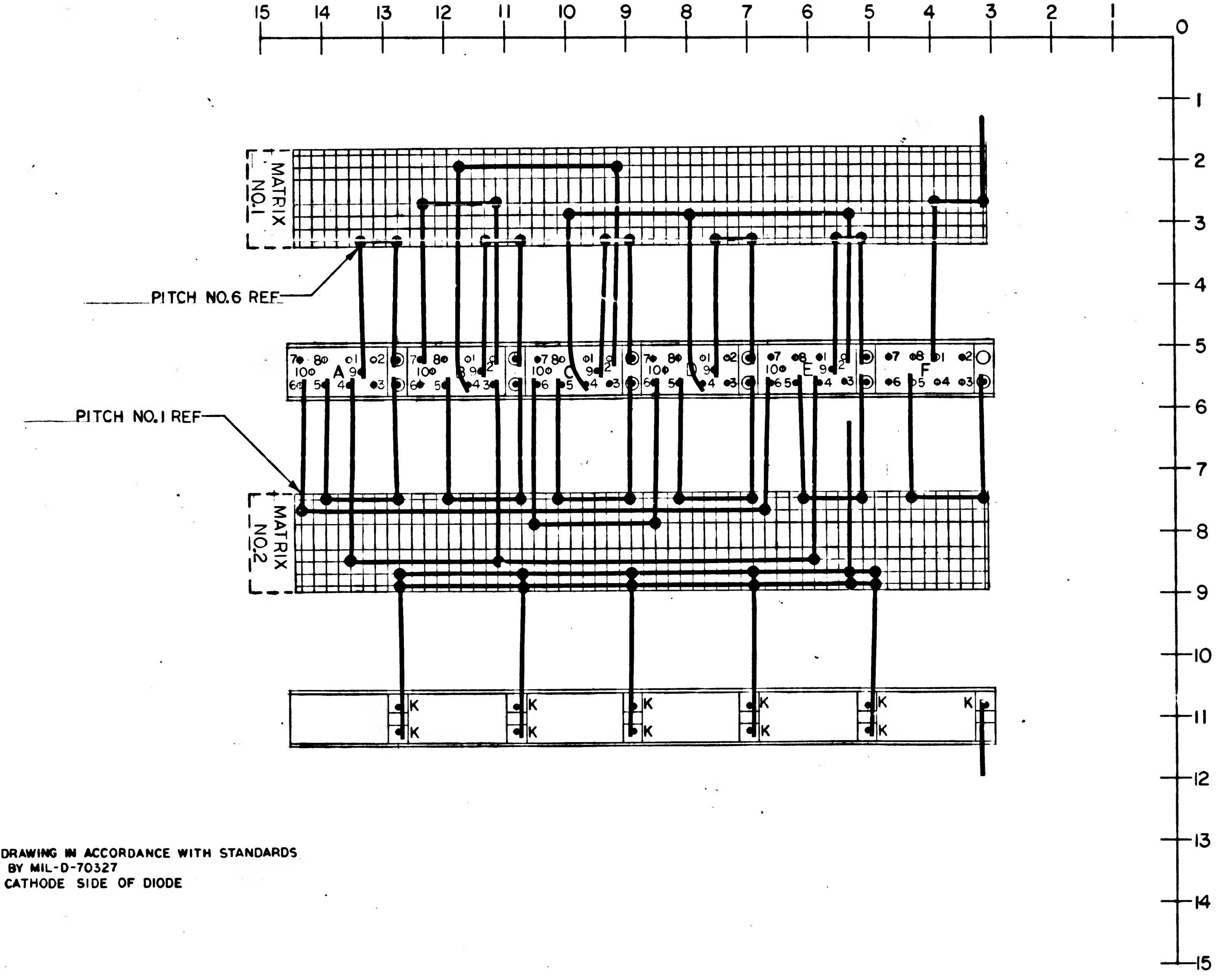

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

1003521	
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APPLICATION	

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DWG. NO. CONTRACT
DRAWN J. Falzone DATE 21 AUG 63
CHECKED 26 Aug 63
APPROVAL 28 Aug 63
APPROVAL Eldon C Hall 5 Sep 63
NASA APPROVAL 9/9/63
MIT APPROVAL
MIT APPROVAL 9/5/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RELAY STICKS 1 AND 3
WIRING DIAGRAM

CODE IDENT NO. —
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SCALE 2/1
WT
SHEET 1 OF 1

INCHES
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PHOTOGRAPHIC SCALE ONLY

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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
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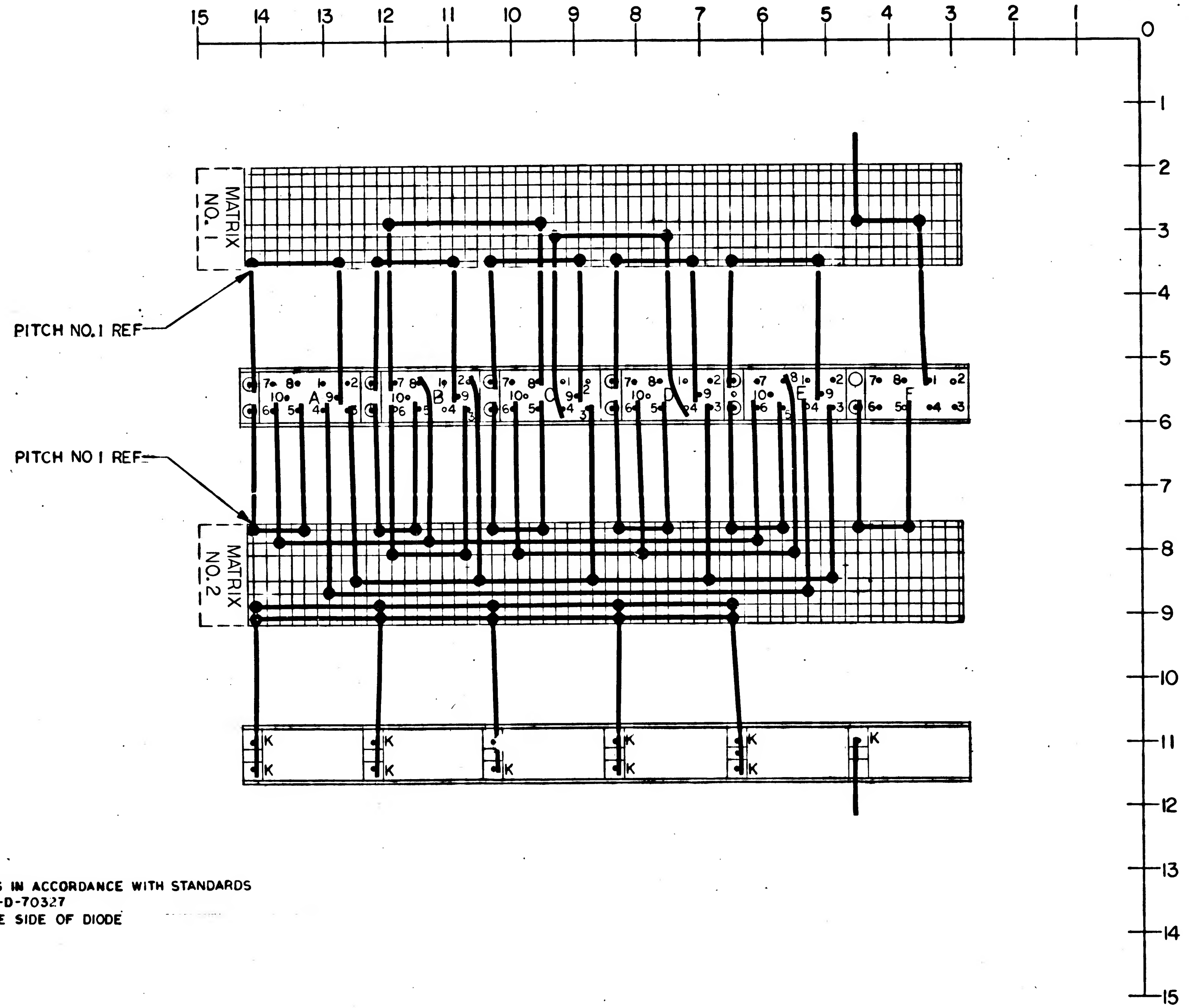

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ± DECIMALS ± ANGLES ± DO NOT SCALE THIS DRAWING	MIT INSTRUMENTATION LAB CAMBRIDGE, MASS. DWG NO. CONTRACT
APPLICATION		MATERIAL	DRAWN J. Falzone DATE 5/1/63 CHECKED 26 Aug 63 APPROVAL 28 Aug 63 APPROVAL Eldon C Hall 5 Sept 63
		HEAT TREATMENT	NASA APPROVAL 9/5/63 MIT APPROVAL MIT APPROVAL 9/5/63
		FINAL FINISH	

MANNED SPACECRAFT CENTER
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RELAY STICK 2
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO.	SIZE	NASA DRAWING NO.
—	D	1006111
SCALE 2/1	WT	SHEET 1 OF 1

D 1006111

INCHES
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PHOTOGRAPHIC SCALE ONLY

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REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02918	9/5/63	
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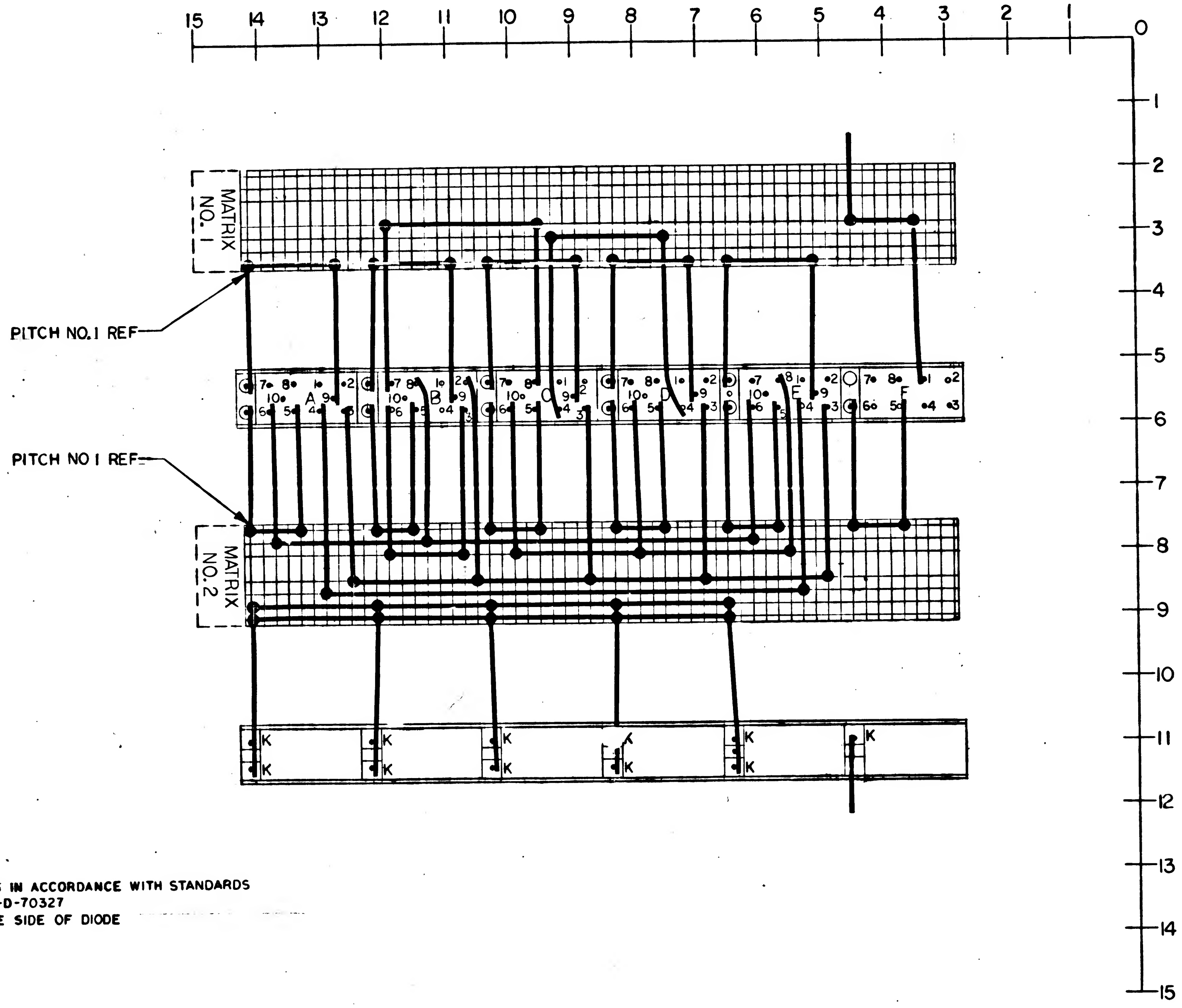
B	REVISED PER TDRR 06050		



REFERANCE DWGs:
1. MECHANICAL ASSY - 1003521

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

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DRAWN J. Falzone DATE 5/1/63
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APPROVAL 28 Aug 63
APPROVAL 5 Sept 63
NASA APPROVAL 9/5/63
MIT APPROVAL
MIT APPROVAL 9/5/63

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HOUSTON, TEXAS

RELAY STICK 2
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. —— SIZE D NASA DRAWING NO. 1006111
SCALE 2/1 WT SHEET 1 OF 1

D 1006111

INCHES
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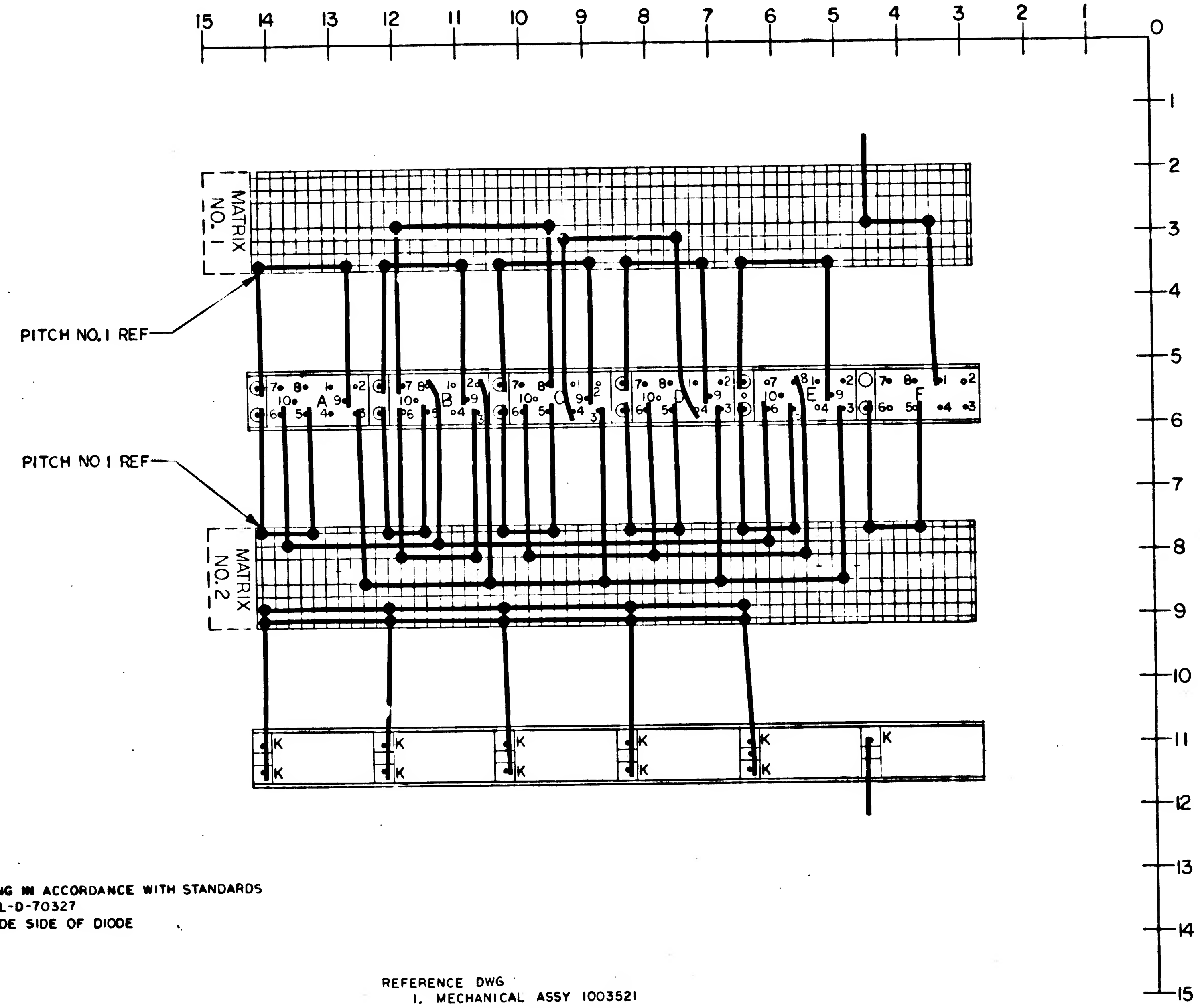
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02718	9/5/63	[illegible]
A	REVISED PER TDRR 04748	14 Apr 63	[illegible]
B	REVISED PER TDRR 06050	29 Jun 64	[illegible]
C	REVISED PER TDRR 07347 DR B Jensen CHK [illegible]	16 Nov 64	[illegible]



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

REFERENCE DWG
1. MECHANICAL ASSY 1003521

REFERANCE DWG:
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DRAWN J. Falzone DATE 5/1/63
CHECKED R.F. Bond 26 Aug 63
APPROVAL T.J. Thomas 28 Aug 63
APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL [illegible] 9/6/63
MIT APPROVAL
MIT APPROVAL J. Nalzel 9/5/63

MANNED SPACECRAFT CENTER
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RELAY STICK 2
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. ——
SIZE D
NASA DRAWING NO. 1006111
SCALE 2/1
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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
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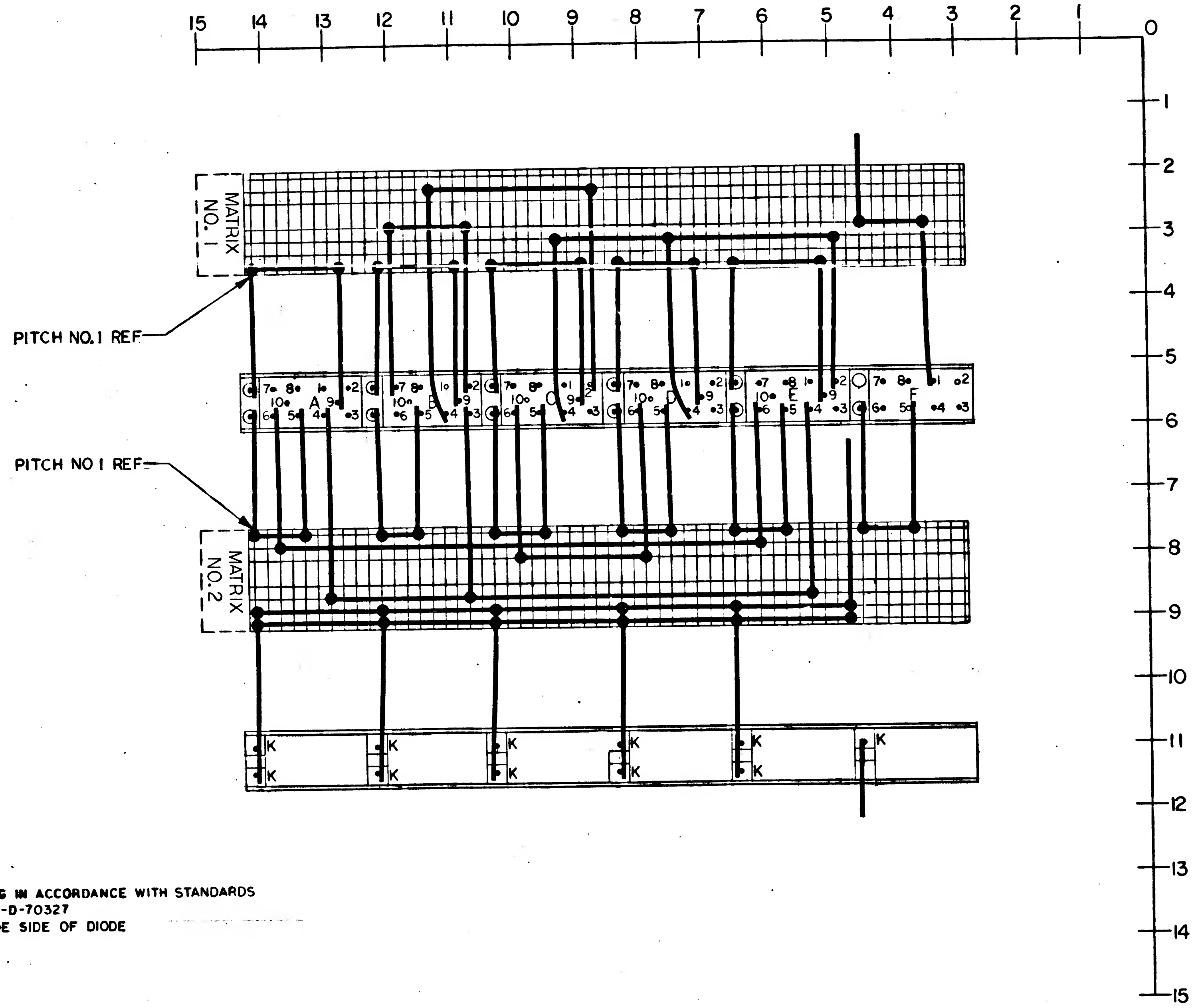

NOTES
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2. K DENOTES CATHODE SIDE OF DIODE

MASTER

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DWG. NO. CONTRACT
DRAWN J. Falzone DATE 5/1/63
CHECKED 26 Aug 63
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APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL 9/5/63
MIT APPROVAL
MIT APPROVAL 9/5/63

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RELAY STICK 2
WIRING DIAGRAM

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006111
SCALE 2/1
WT
SHEET 1 OF 1

INCHES
0 2
PHOTOGRAPHIC SCALE ONLY

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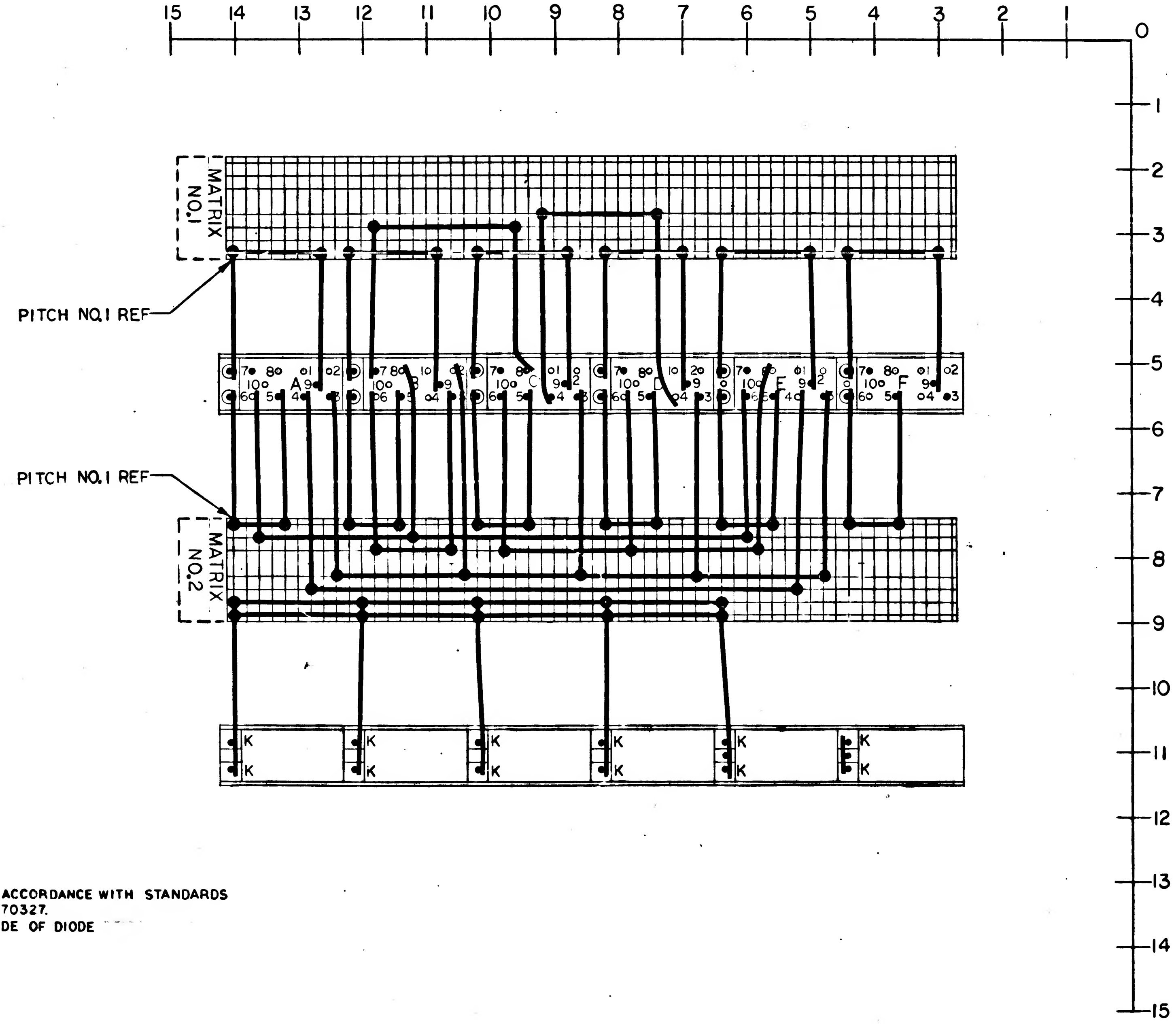
A	REVISED PER TDRR 04745		



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. K DENOTES CATHODE SIDE OF DIODE

D 1006112

MASTER

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LIST OF MATERIALS

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DRAWN J. Falzone DATE 5/2/63
CHECKED R.F. Burch 26 Aug 63
APPROVAL T.J. Ahearn 28 Aug 63
APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL 9/9/63
MIT APPROVAL
MIT APPROVAL 9/5/63

MANNED SPACECRAFT CENTER
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RELAY STICKS 4 AND 6
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006112
SCALE 2/1
WT
SHEET 1 OF 1

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A	REVISED PER TDRR 04745		
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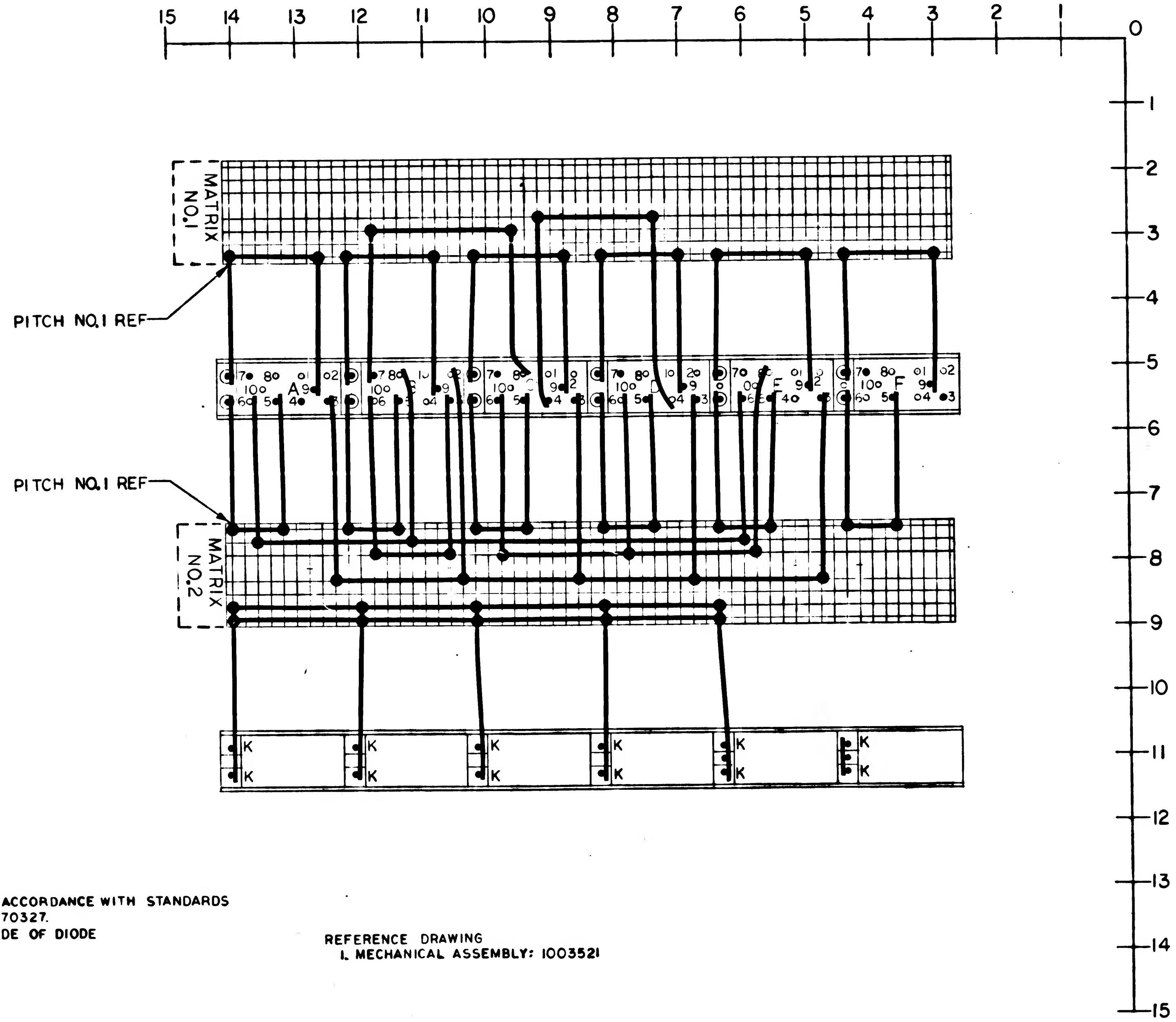

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1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
2. K DENOTES CATHODE SIDE OF DIODE

REFERENCE DRAWING
1. MECHANICAL ASSEMBLY: 1003521

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NASA APPROVAL 9/5/63
MIT APPROVAL
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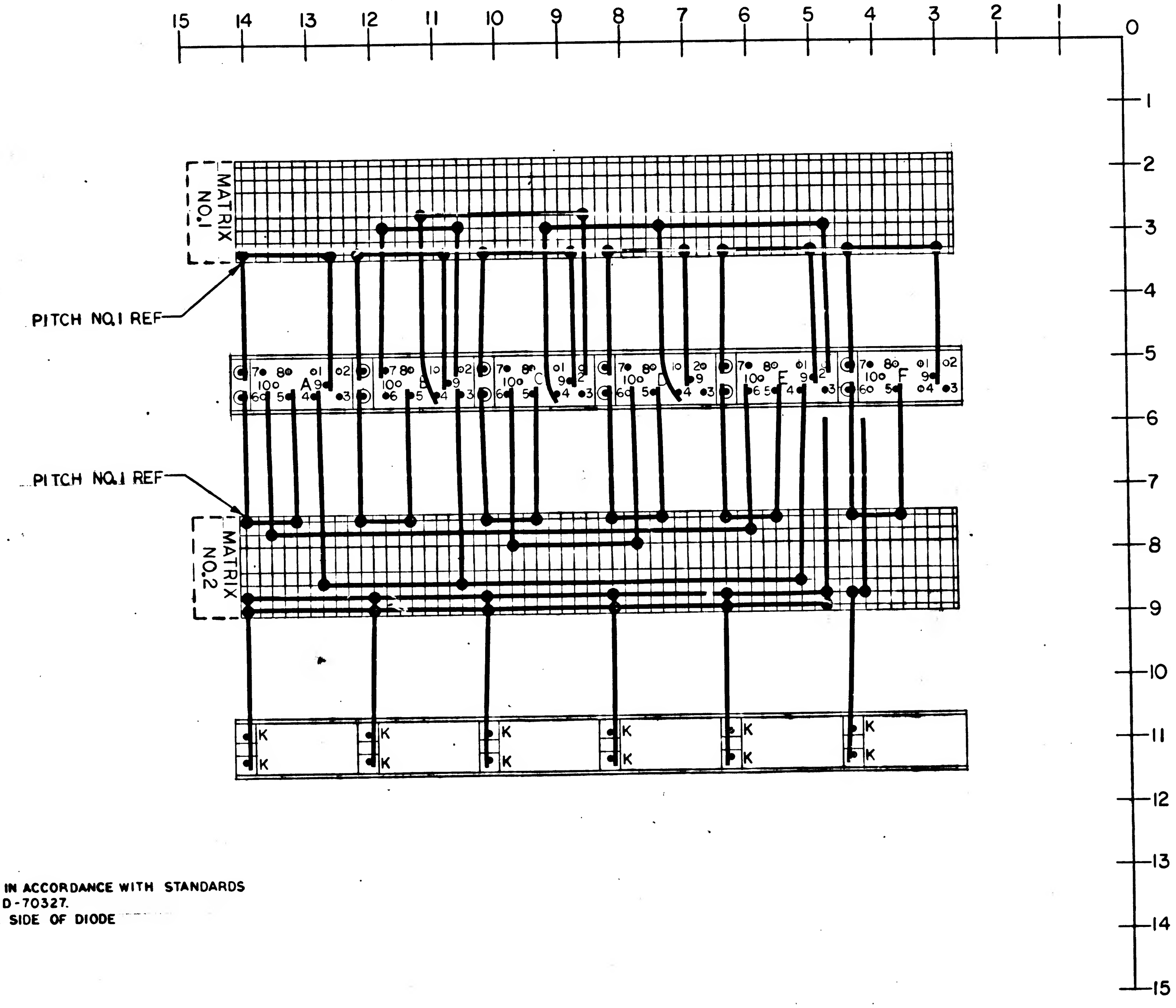

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1003521	
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LIST OF MATERIALS

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DWG. NO. CONTRACT

DRAWN J. Falzone DATE 7/2/63
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APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL 9/6/63
MIT APPROVAL
MIT APPROVAL J. Hatzel 9/5/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RELAY STICKS 4 AND 6
WIRING DIAGRAM

CODE IDENT NO. —
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NASA DRAWING NO. 1006112
SCALE 2/1
WT
SHEET 1 OF 1

D 1006112

INCHES
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PHOTOGRAPHIC SCALE ONLY

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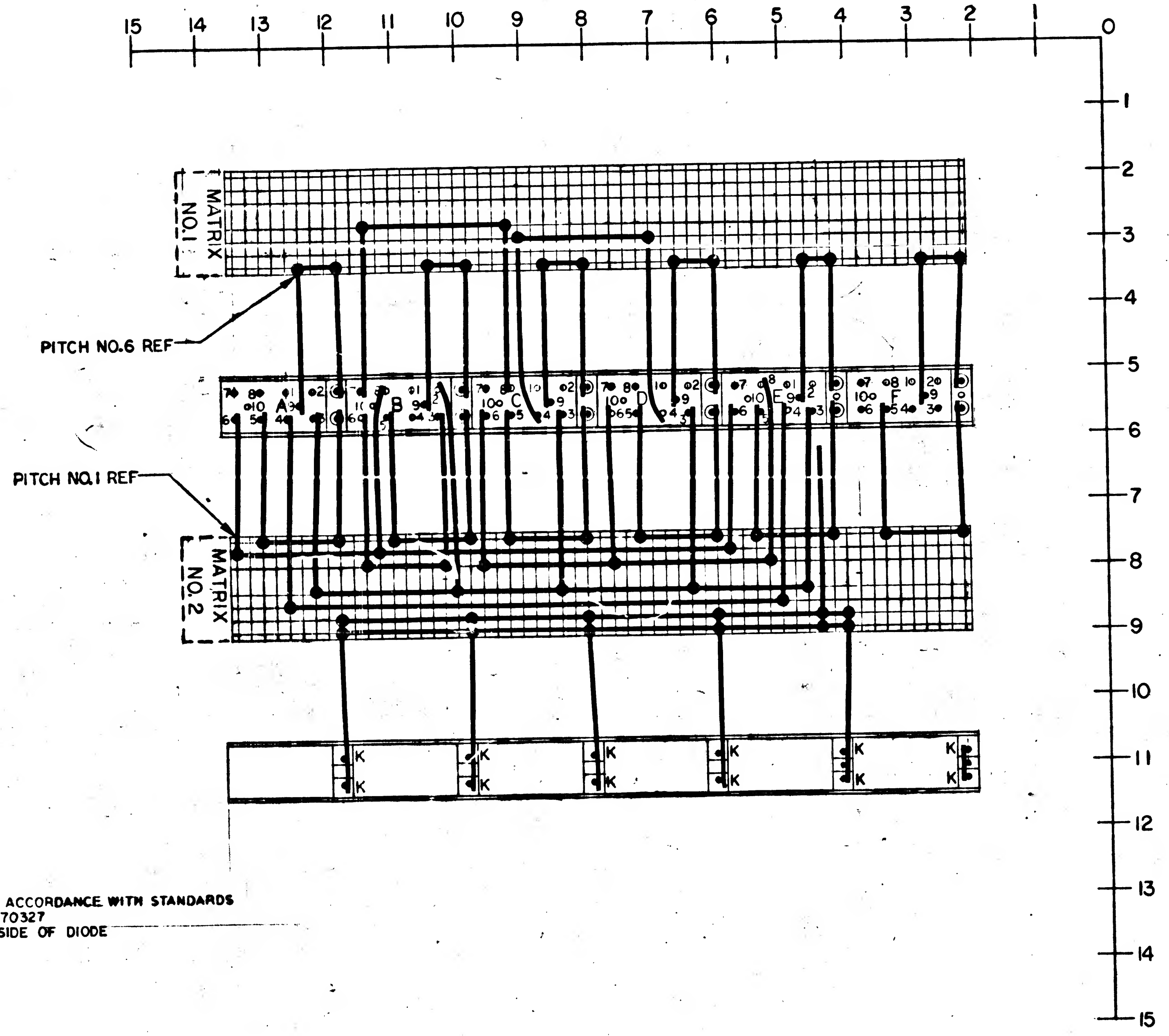

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DWG. NO. CONTRACT

DRAWN J. Falzone DATE 31 MAY 63
CHECKED 26 Aug 63
APPROVAL 28 Aug 63
APPROVAL Eldon C. Hall 5 Sept 63
NASA APPROVAL 9/7/63
MIT APPROVAL
MIT APPROVAL 9/5/63

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RELAY STICK 5
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. —— SIZE D NASA DRAWING NO. 1006113
SCALE 2/1 WT SHEET 1 OF 4

INCHES
0 1 2
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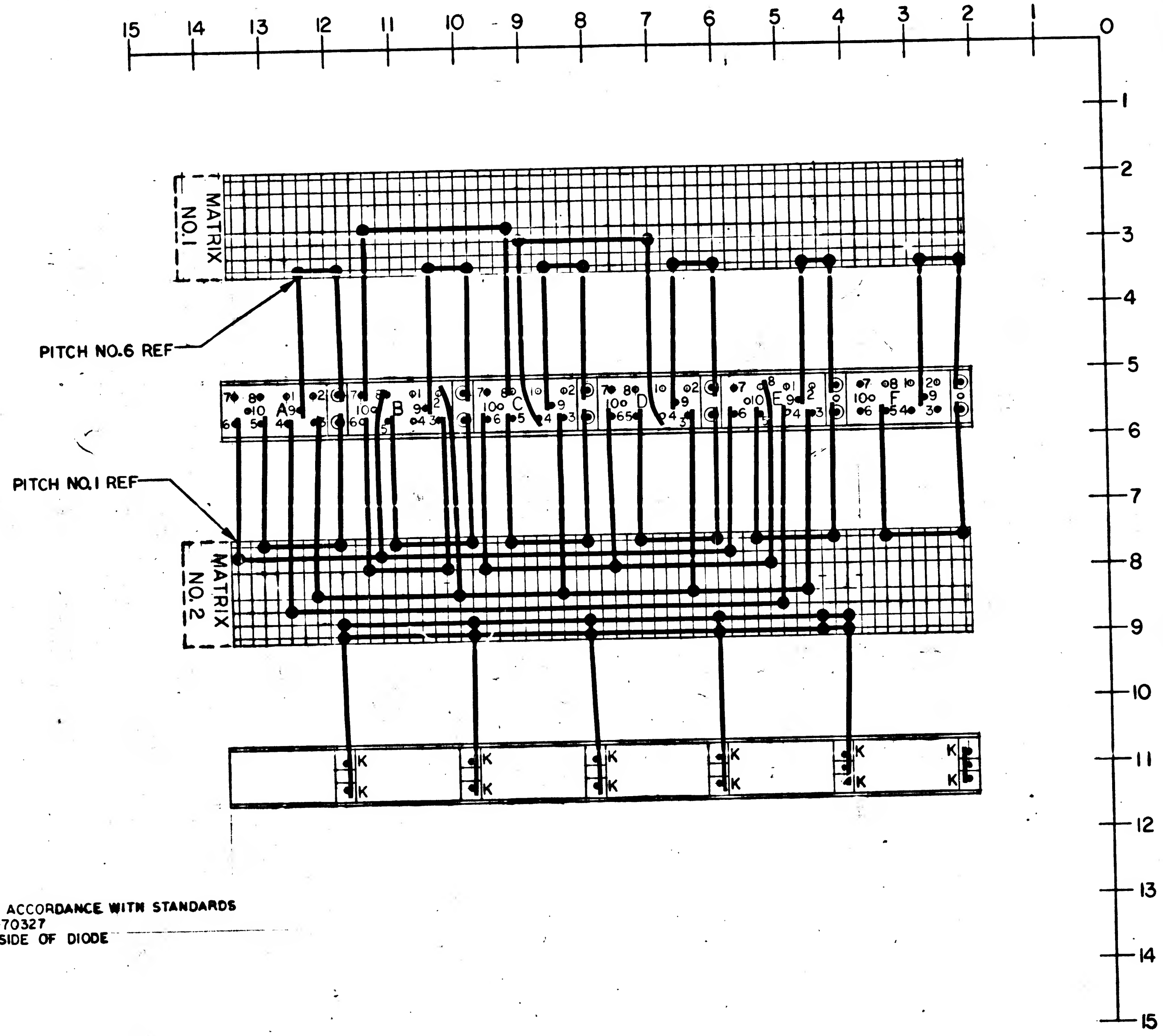
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02718	9/6/63	DW
A	REVISED PER TDRR 04797	11-12-63	[illegible]
B	REVISED PER TDRR 05394	27 Dec 63	WK



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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DWG. NO. CONTRACT
DRAWN J. Falzone DATE 31 MAY 63
CHECKED R. E. Bunker 26 Aug 63
APPROVAL T. J. Plummer 28 Aug 63
APPROVAL Eldon C. Hall 5 Sept 63
NASA APPROVAL 9/5/63
MIT APPROVAL
MIT APPROVAL 9/5/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

RELAY STICK 5
WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006113
SCALE 2/1
WT
SHEET 1 OF 3

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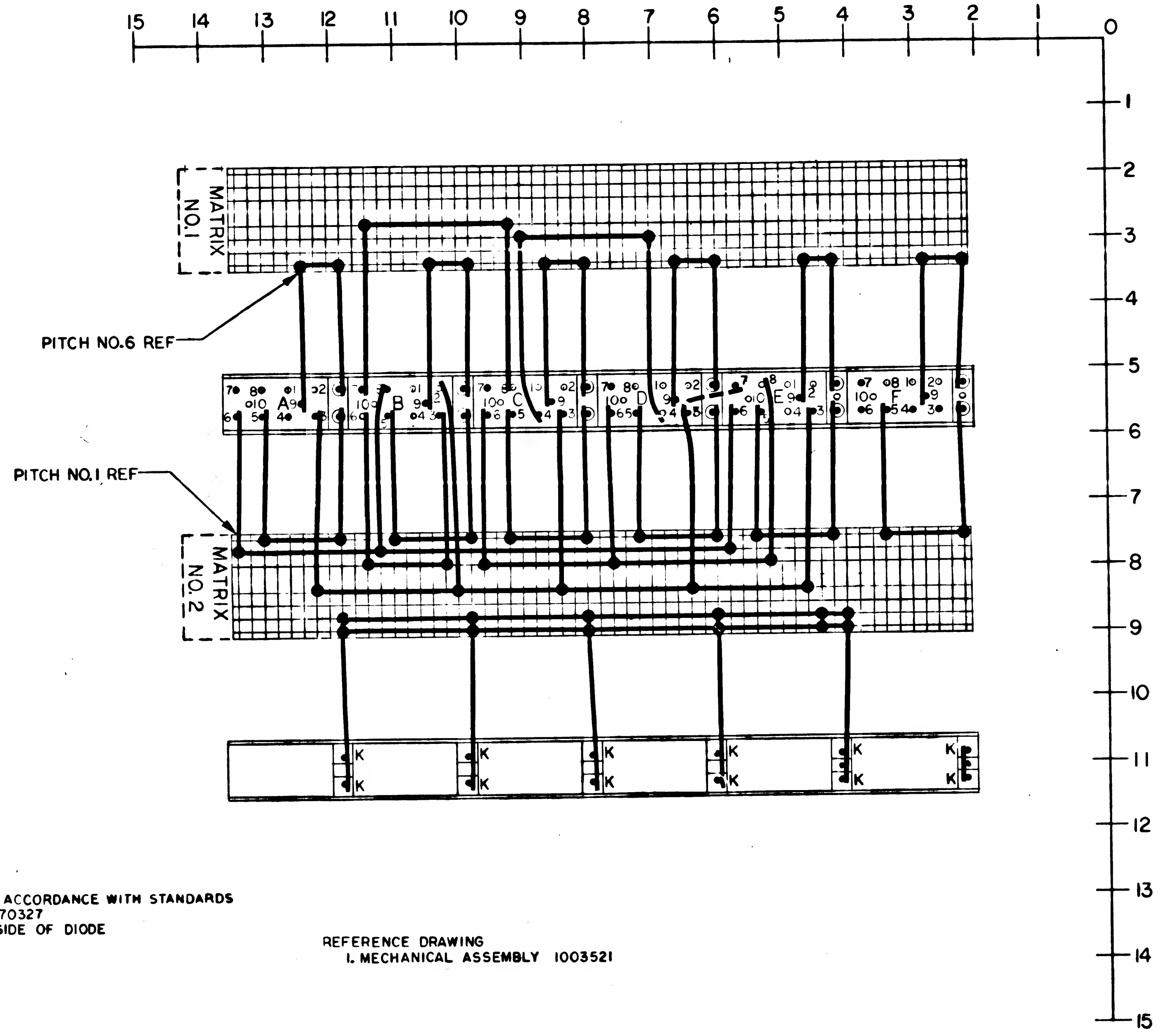
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02718	9/18/63	
A	REVISED PER TDRR 04797	11-19-63	
B	REVISED PER TDRR 05394	Dec 63	WK
C	REVISED PER TDRR 07347 DR D.W. Bennett CHK	Apr 64	



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

REFERENCE DRAWING
1. MECHANICAL ASSEMBLY 1003521

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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APPROVAL 5 Sept 63
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MIT APPROVAL 9/5/63

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WIRING DIAGRAM
AGC DSKY, NAV & MAIN

CODE IDENT NO. ——
SIZE D
NASA DRAWING NO. 1006113
SCALE 2/1
WT
SHEET 1 OF 1

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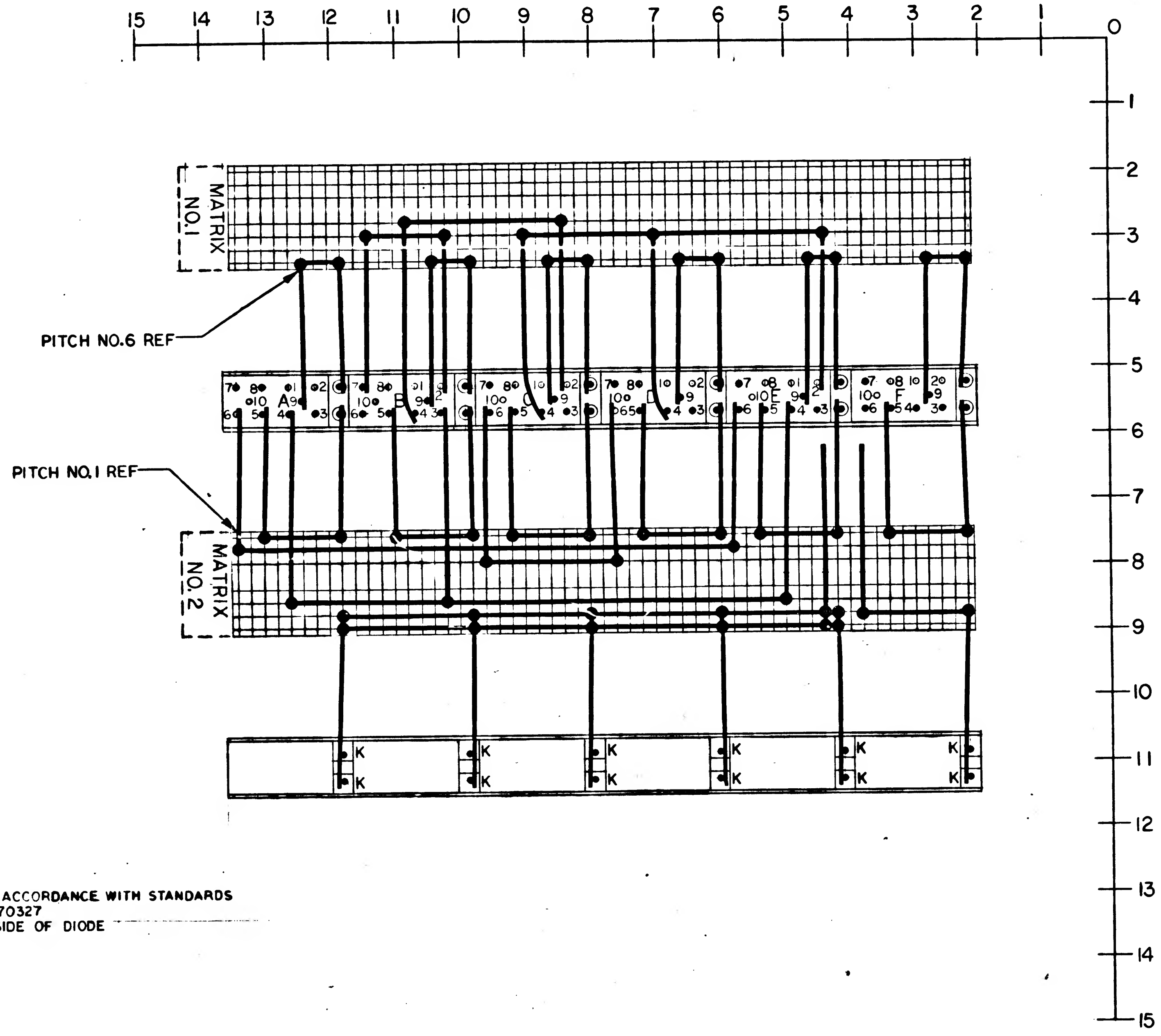
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
—	CLASS A RELEASE PER TDRR 02718	9/5/63	



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
1003521	

APPLICATION

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CHECKED 26 Aug 63
APPROVAL 28 Aug 63
APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL 9/5/63
MIT APPROVAL
MIT APPROVAL 9/5/63

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RELAY STICK 5
WIRING DIAGRAM

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006113
SCALE 2/1
WT
SHEET 1 OF 1

D 1006113

INCHES
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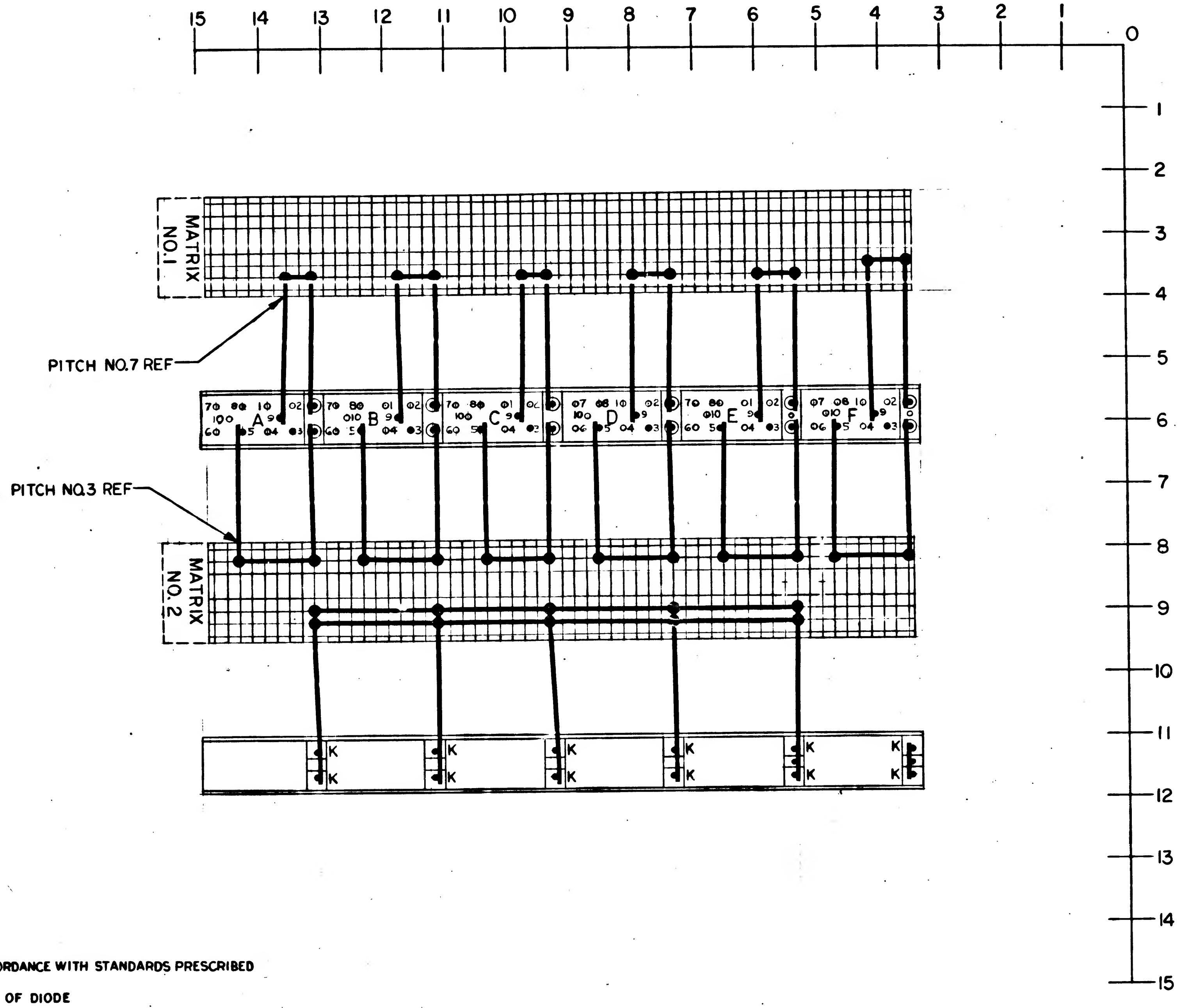
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
-	CLASS A RELEASE PER TDRR 02918	9/5/63	JW
A	REVISED PER TDRR 04754	11/2/63	BK JW



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

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DWG. NO. CONTRACT
DRAWN Ed Powers DATE 31 May 63
CHECKED 26 Aug 63
APPROVAL 26 Aug 63
APPROVAL Eldon C Hall 5 Sep 63
NASA APPROVAL 9/4/63
MIT APPROVAL
MIT APPROVAL 9/5/63

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RELAY STICK 7
WIRING DIAGRAM
AGC DSKY, NAVs MAIN

CODE IDENT NO. SIZE D NASA DRAWING NO. 1006117 ✓
SCALE 2/1 WT SHEET 1 OF 1

MASTER

INCHES
0 1 2
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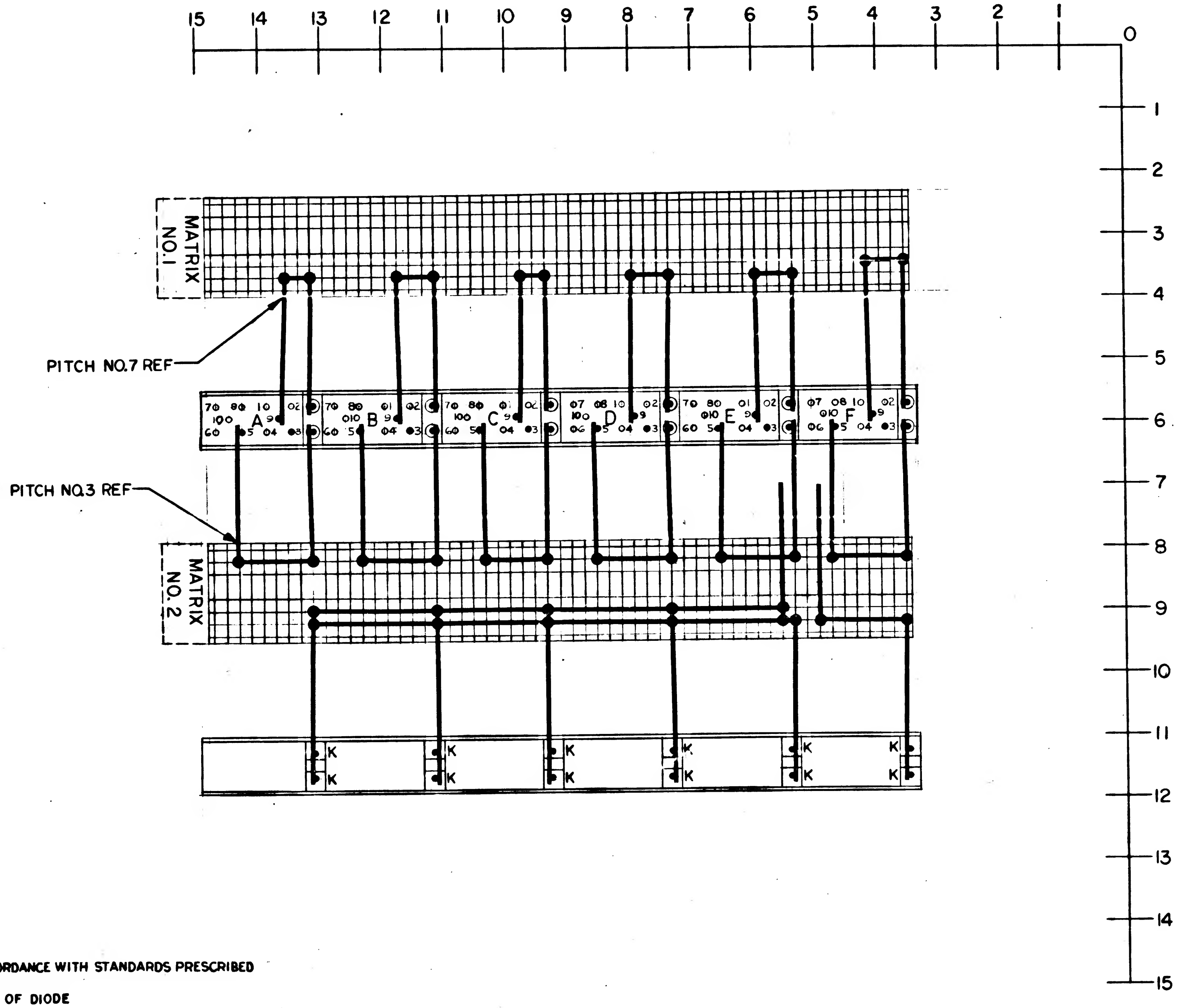
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
–	CLASS A RELEASE PER TDRR 02912	9/5/63	



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. K DENOTES CATHODE SIDE OF DIODE

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

1003521	
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APPLICATION	

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DWG. NO. CONTRACT
DRAWN Ed Powers DATE 31 May 63
CHECKED [illegible] 26 Aug 63
APPROVAL [illegible] 26 Aug 63
APPROVAL Eldon C Hall 5 Sept 63
NASA APPROVAL [illegible] 9/9/63
MIT APPROVAL
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CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006117 ✓
SCALE 2/1 | WT | SHEET 1 OF 1

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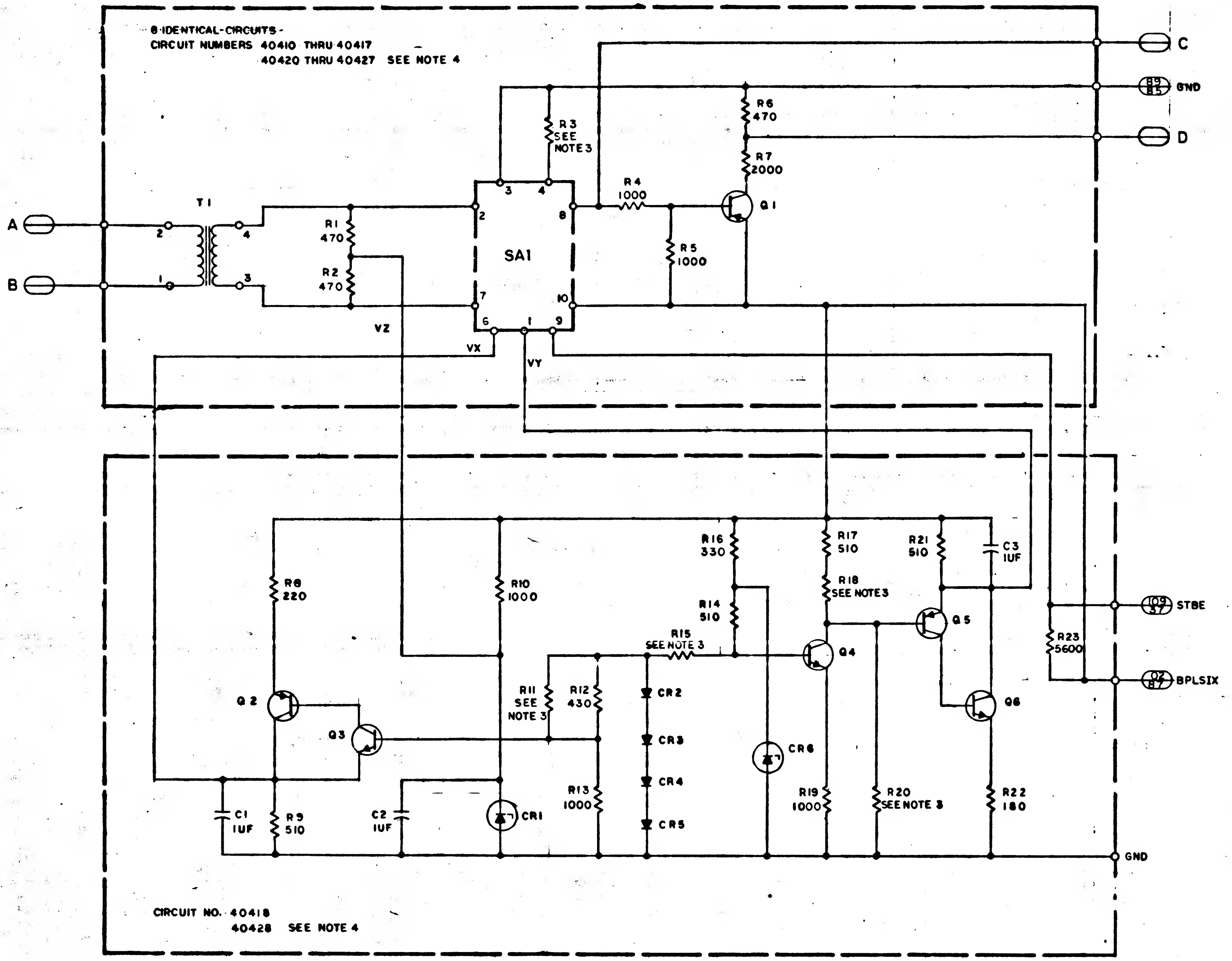
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	7-3-63	



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 01967 DATE 7/10/63

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427
R2	-24		470			
R3	-		SEE NOTE			
R4	-32		1000			
R5	-32		1000			
R6	-24		470			
R7	-39		2000			
R8	-16		220			40418, 40428
R9	-25		510			
R10	-32		1000			
R11	-		SEE NOTE			
R12	-23		430			
R13	-32		1000			
R14	-25		510			
R15	-		SEE NOTE		1/4 W	
R16	1006760 - 20		330		1/2 W	
R17	1006750 - 25		510		1/4 W	
R18	-		SEE NOTE			
R19	-32		1000			
R20	-		SEE NOTE			
R21	-25		510			
R22	-14		180			
R23	-50		5600			
C1	1006755-68	CAPACITOR	1 UF		35V	
C2						
C3						
CR1	1010372-7	DIODE				
CR2	1006751					
CR3						
CR4						
CR5	1006751					
CR6	1006838					
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418, 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752					
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

40420 THRU 40427

R11		R11		R20		R20	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400	1006750-56	10K	1006750-72	47K
-26	560	-42	2700	-57	11K	-73	51K
-27	620	-43	3000	-58	12K	-74	56K
-28	680	-44	3300	-59	13K	-75	62K
-29	750	-45	3600	-60	15K	-76	68K
-30	820	-46	3900	-61	16K	-77	75K
-31	910	-47	4300	-62	18K	-78	82K
-32	1000	-48	4700	-63	20K	-79	91K
-33	1100	-49	5100	-64	22K	-80	100K
-34	1200	-50	5600	-65	24K	-81	110K
-35	1300	-51	6200	-66	27K	-82	120K
-36	1500	-52	6800	-67	30K	-83	130K
-37	1600	-53	7500	-68	33K	1006750-84	140K
-38	1800	-54	8200	-69	36K		
-39	2000	-55	9100	-70	39K		
1006750-40	2200	1006750-56	10K	1006750-71	43K		

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA08	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

SEE NOTE 4

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18, R20 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE NO. 2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

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DIMENSIONS ARE IN INCHES
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INSTRUMENTATION LAB
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DRAWN A. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C. Hall 10 July 63
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE SENSE AMPL MODULE

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006118
SCALE — | WT — | SHEET 1 OF 1

1006118 A

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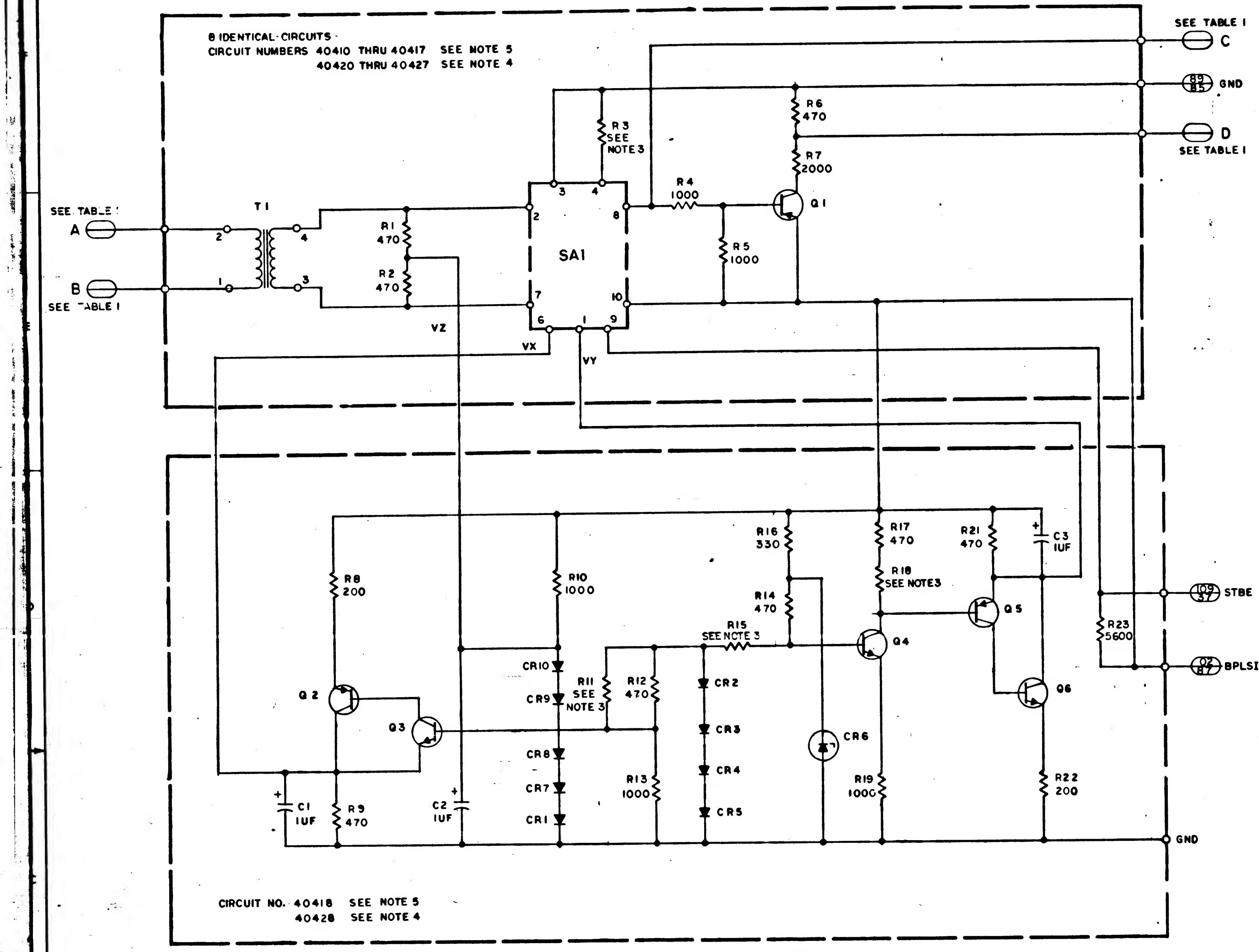
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	7-30-63	
B	REVISED PER TDRR 03124	9-13-63	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427
R2	-24		470			
R3	-		SEE NOTE 3			
R4	-32		1000			
R5	-32		1000			
R6	-24		470			
R7	-39		2000			
R8	-15		200			40418 40428
R9	-24		470			
R10	-32		1000			
R11	-		SEE NOTE 3			
R12	-24		470			
R13	-32		1000			
R14	-24		470		↓	
R15	↓ -		SEE NOTE 3		1/4 W	
R16	1006760 -20		330		1/2 W	
R17	1006750 -24		470		1/4 W	
R18	-		SEE NOTE 3			
R19	-32		1000			
~~R20~~	-					
R21	-24		470			
R22	-15		200			
R23	↓ -50	↓	5600	↓	↓	
C1	1006755-68	CAPACITOR	1 UF		35V	
C2						
C3	↓	↓	↓		↓	
CR1	1006751	DIODE				
CR2						
CR3						
CR4						
CR5	↓					
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10	↓	↓				↓ ↓
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418 , 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752	↓				↓ ↓
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

40420 THRU 40427

TABLE II

11		R11	
PART).	VALUE	PART NO.	VALUE
1006750-15	200	1006750-31	910
-16	220	-32	1000
-17	240	-33	1100
-18	270	-34	1200
-19	300	-35	1300
-20	330	-36	1500
-21	360	-37	1600
-22	390	-38	1800
-23	430	-39	2000
-24	470	-40	2200
-25	510	-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
↓ -29	750	↓ -45	3600
1006750 -30	820	1006750-46	3900

TABLE I

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA09	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

TABLE III

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750 - 1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	↓ -48	4700
-42	2700	-18	270	1006750- 49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
↓ -48	4700	↓ -24	470		
1006750-49	5100	1006750 -25	510		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II AND III
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE B14
5. CIRCUIT NO. 40410 THRU 40417 AND 40418 TO BE IN MODULE B13

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN A. Di Leo DATE 21 MAY 63
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C Hall 10 July 63
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

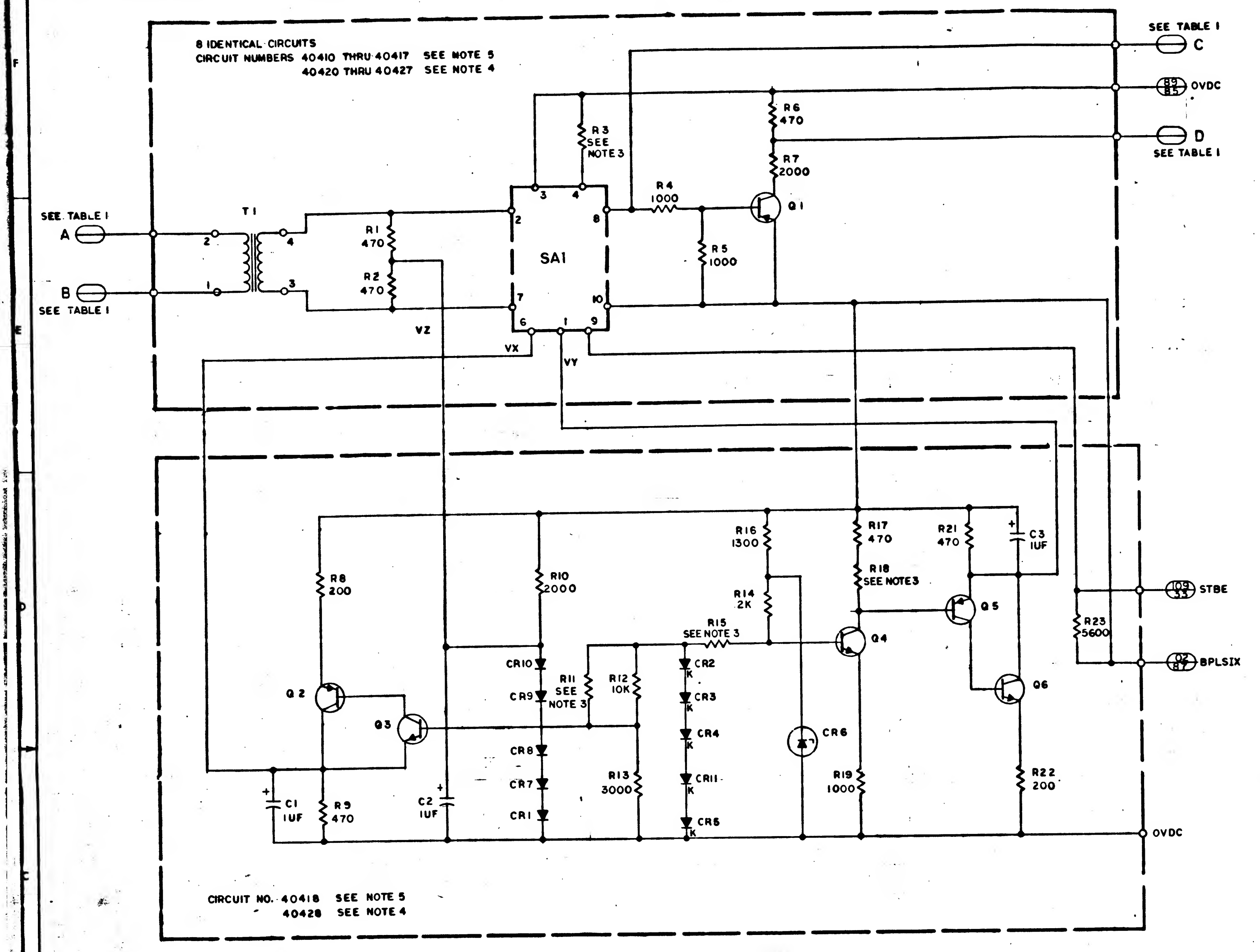
SCHEMATIC, ERASABLE
SENSE AMPL MODULE B13-B14

CODE IDENT NO. — | SIZE E | NASA DRAWING NO. 1006118
SCALE — | WT — | SHEET 1 OF 1

1006118 B

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

SYM	REVISIONS DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	7-30-63	
B	REVISED PER TDRR 03124	2-13-63	
C	REVISED PER TDRR 03441	9-26-63	



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	
R2	-24		470			
R3	-		SEE NOTE 3			40410 THRU 40417
R4	-32		1000			
R5	-32		1000			40420 THRU 40427
R6	-24		470			
R7	-39		2000			
R8	-15		200			40418 40428
R9	-24		470			
R10	-39		2K			
R11	-		SEE NOTE 3			
R12	-56		10K			
R13	-43		3K			
R14	-39		2K			
R15	-		SEE NOTE 3			
R16	-35		1300			
R17	-24		470			
R18	-		SEE NOTE 3			
R19	-32		1000			
~~R20~~	-					
R21	-24		470			
R22	-15		200			
R23	-50		5600			
C1	1006755-69	CAPACITOR	1 UF		35 V	
C2						
C3						
CR1	1006751	DIODE				
CR2						
CR3						
CR4						
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418 , 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752					
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

40420 THRU 40427

TABLE III

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

TABLE II

R11		R11	
PART NO.	VALUE	PART NO.	VALUE
1006750-15	200	1006750-31	910
-16	220	-32	1000
-17	240	-33	1100
-18	270	-34	1200
-19	300	-35	1300
-20	330	-36	1500
-21	360	-37	1600
-22	390	-38	1800
-23	430	-39	2000
-24	470	-40	2200
-25	510	-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
1006750-30	820	1006750-46	3900

TABLE I

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA08	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II AND III
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE B14
5. CIRCUIT NO. 40410 THRU 40417 AND 40418 TO BE IN MODULE B13

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN A. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins 7/10
APPROVAL Eldon C Hall 10 July 63
NASA APPROVAL
MIT APPROVAL R B Trageser

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE SENSE AMPL MODULE B13-B14

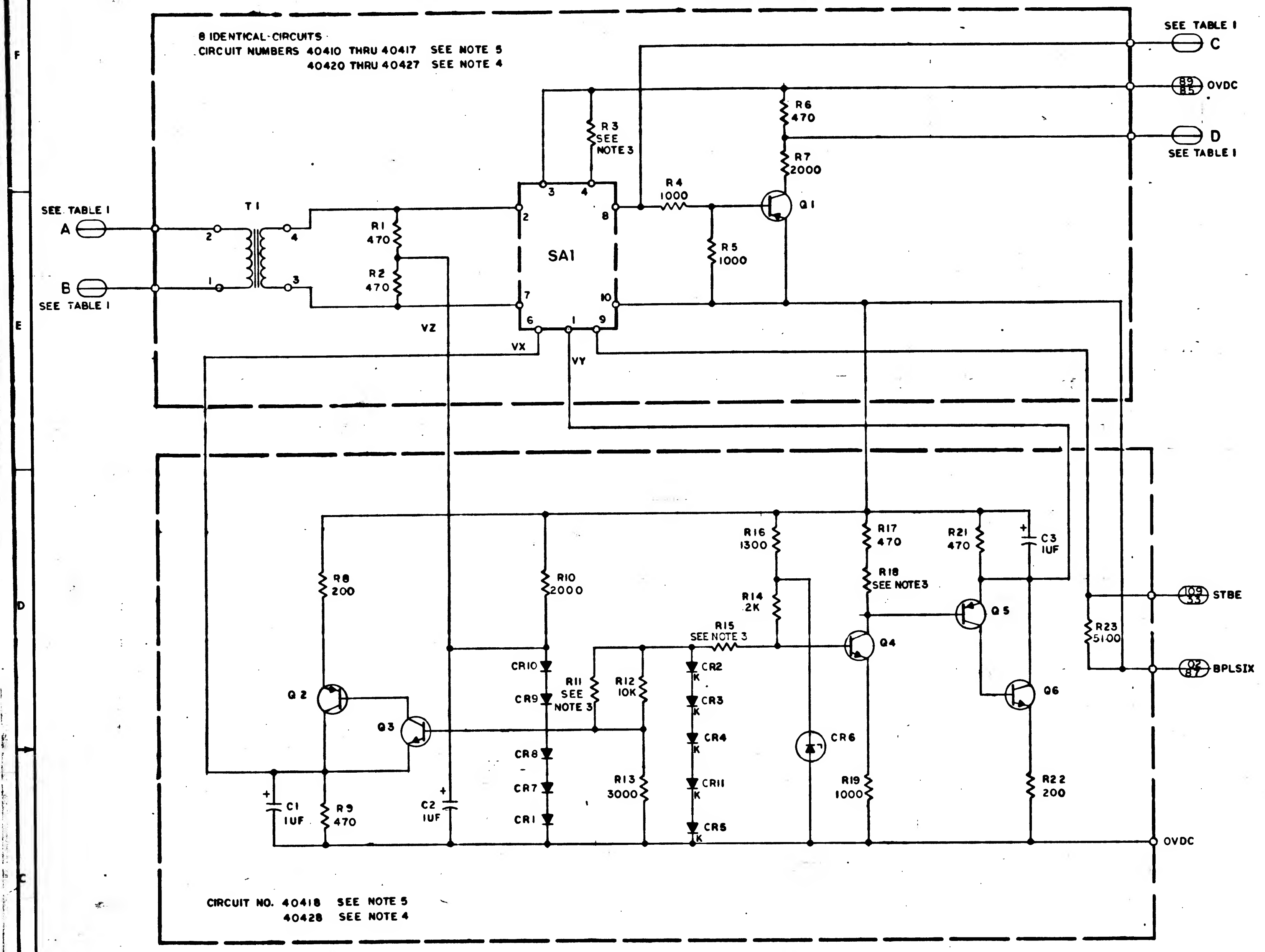
CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006118
SCALE — WT — SHEET 1 OF 1

1006118 C

MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	7-30-63	RPK
B	REVISED PER TDRR 03129	8-12-63	
C	REVISED PER TDRR 03441	9-26-63	
D	REVISED PER TDRR 03844	10-3-63	



40420 THRU 40427

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427
R2	-24		470			
R3	-		SEE NOTE 3			
R4	-32		1000			
R5	-32		1000			
R6	-24		470			
R7	-39		2000			
R8	-15		200			40418 40428
R9	-24		470			
R10	-39		2K			
R11	-		SEE NOTE 3			
R12	-56		10K			
R13	-43		3K			
R14	-39		2K			
R15	-		SEE NOTE 3			
R16	-35		1300			
R17	-24		470			
R18	-		SEE NOTE 3			
R19	-32		1000			
~~R20~~	-					
R21	-24		470			
R22	-15		200			
R23	-49		5100			
C1	1006755-69	CAPACITOR	1 UF		35V	
C2						
C3						
CR1	1006751	DIODE				
CR2						
CR3						
CR4						
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418 , 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752					
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

TABLE II

R11		R11	
PART NO.	VALUE	PART NO.	VALUE
1006750-15	200	1006750-31	910
-16	220	-32	1000
-17	240	-33	1100
-18	270	-34	1200
-19	300	-35	1300
-20	330	-36	1500
-21	360	-37	1600
-22	390	-38	1800
-23	430	-39	2000
-24	470	-40	2200
-25	510	-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
1006750-30	820	1006750-46	3900

TABLE I

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA08	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

TABLE III

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II AND III
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE B14
5. CIRCUIT NO. 40410 THRU 40417 AND 40418 TO BE IN MODULE B13

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO.
CONTRACT
DRAWN A. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins 7/10
APPROVAL Eldon C Hall 10 July 63
NASA APPROVAL
MIT APPROVAL

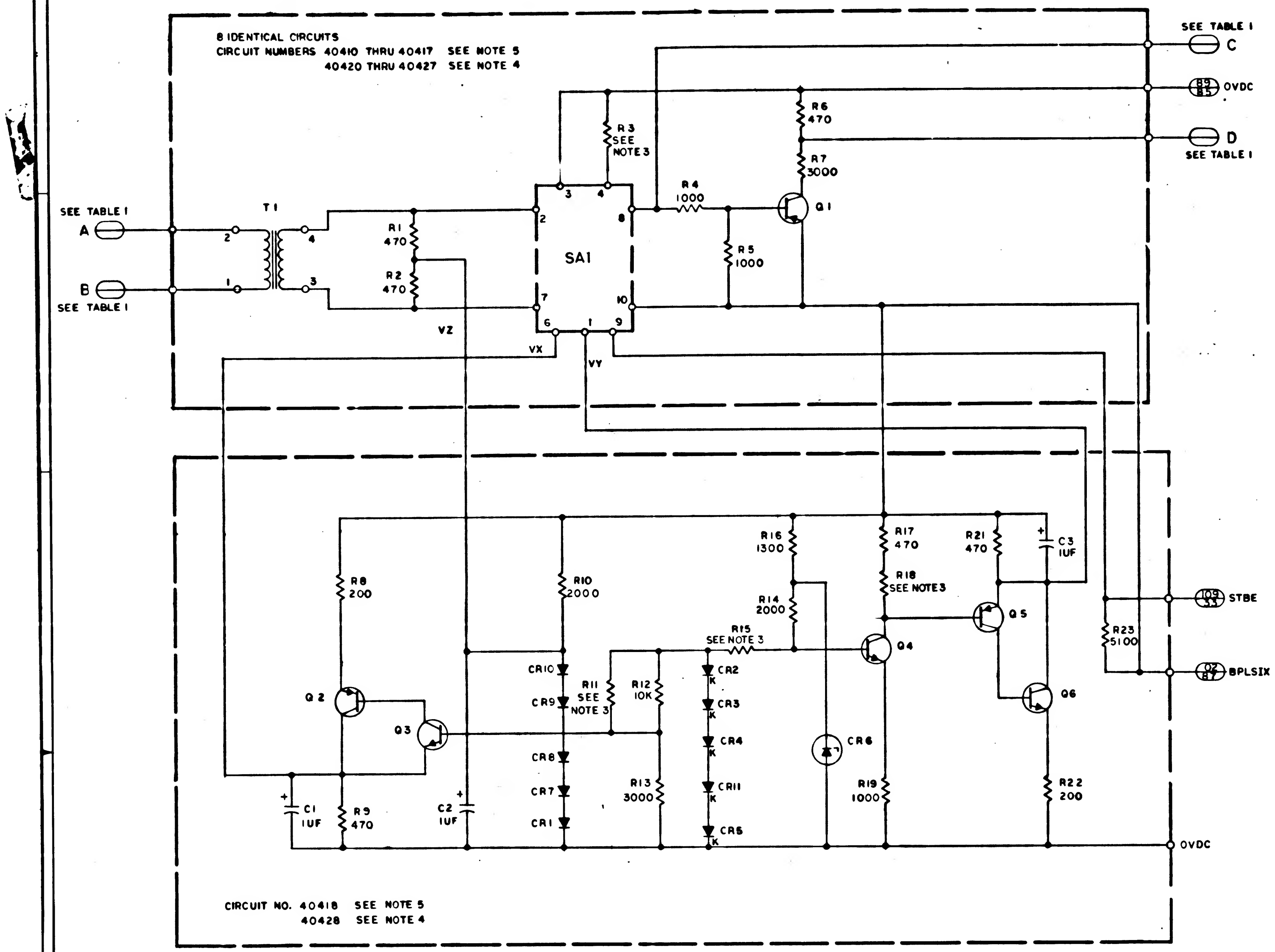
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE SENSE AMPL MODULE B13-B14

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006118
SCALE —
WT —
SHEET 1 OF 1

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	1-30-65	
B	REVISED PER TDRR 03124	2-12-65	
C	REVISED PER TDRR 03441	9-26-65	
D	REVISED PER TDRR 03844	10-3-65	
E	REVISED PER TDRR 08412 DR CHK R.H.E.		



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427
R2	-24		470			
R3	-		SEE NOTE 3			
R4	-32		1000			
R5	-32		1000			
R6	-24		470			
R7	-43		3000			
R8	-15		200			40418 40428
R9	-24		470			
R10	-39		2000			
R11	-		SEE NOTE 3			
R12	-56		10K			
R13	-43		3000			
R14	-39		2000			
R15	-		SEE NOTE 3			
R16	-35		1300			
R17	-24		470			
R18	-		SEE NOTE 3			
R19	-32		1000			
~~R20~~	-					
R21	-24		470			
R22	-15		200			
R23	-49		5100			
C1	1006755-69	CAPACITOR	1 UF		35V	
C2						
C3						
CR1	1006751	DIODE				
CR2						
CR3						
CR4						
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418 , 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752					
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

40420 THRU 40427

TABLE II

R11		R11	
PART NO.	VALUE	PART NO.	VALUE
1006750-15	200	1006750-31	910
-16	220	-32	1000
-17	240	-33	1100
-18	270	-34	1200
-19	300	-35	1300
-20	330	-36	1500
-21	360	-37	1600
-22	390	-38	1800
-23	430	-39	2000
-24	470	-40	2200
-25	510	-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
1006750-30	820	1006750-46	3900

TABLE I

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA08	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

TABLE III

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750 - 1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II AND III
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE B14
5. CIRCUIT NO. 40410 THRU 40417 AND 40418 TO BE IN MODULE B13

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
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DRAWN A. Di Leo
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

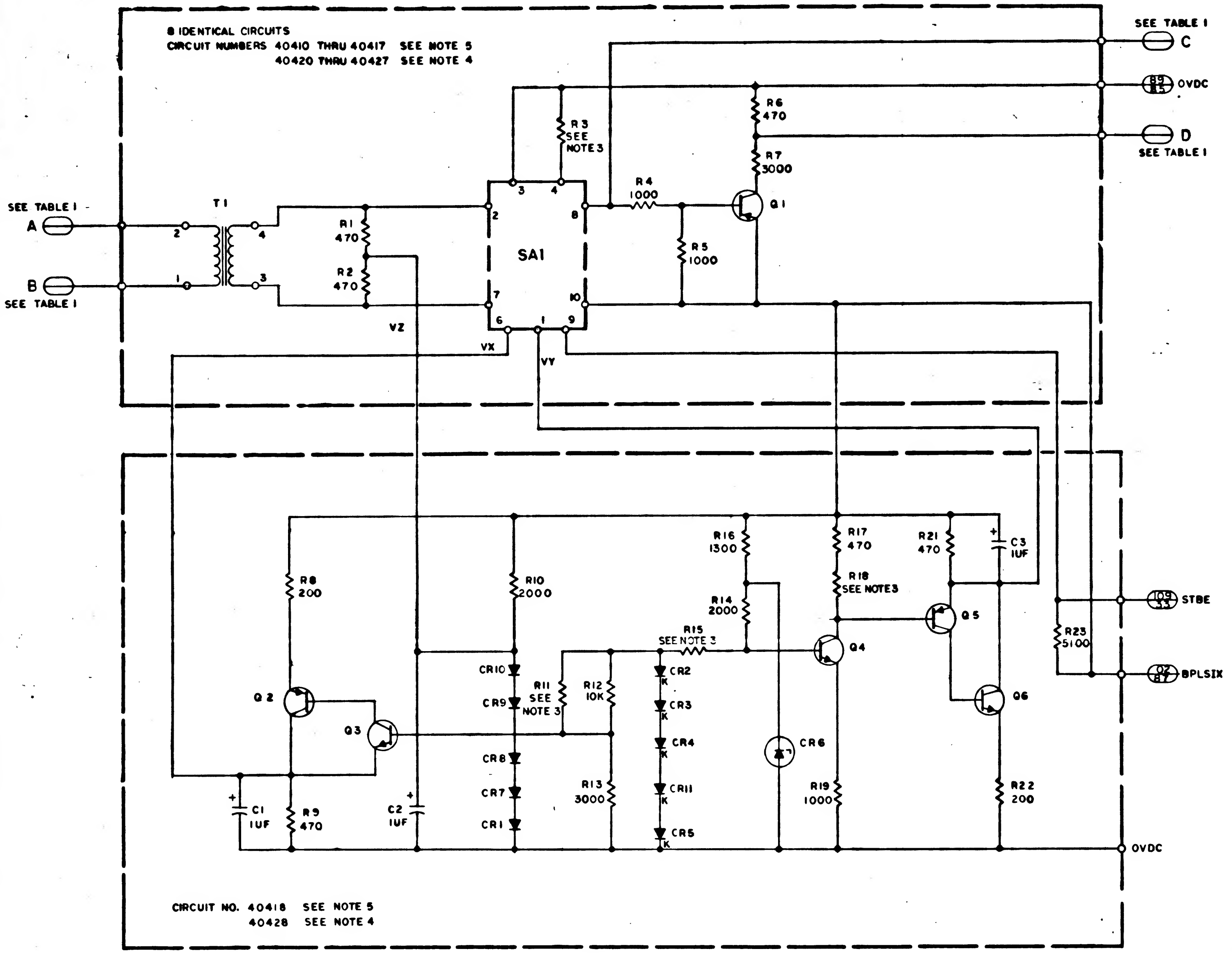
SCHEMATIC, ERASABLE SENSE AMPL MODULE B13-B14

CODE IDENT NO. —
SIZE E
NASA DRAWING NO 1006118
SCALE — WT — SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02286	[illegible]	[illegible]
B	REVISED PER TDRR 03124	[illegible]	[illegible]
C	REVISED PER TDRR 03441	[illegible]	[illegible]
D	REVISED PER TDRR 03?14	10-3-63	[illegible]
E	REVISED PER TDRR 03412 DR [illegible] CHK R.A.E.	4/1/64	[illegible]
F	INACTIVE PER TDRR 10889 DR R.D.Dolly. CHK R.P.B.	7/2/6[illegible]	[illegible]



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON	
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427	
R2	-24		470				
R3	-		SEE NOTE 3				
R4	-32		1000				
R5	-32		1000				
R6	-24		470				
R7	-43		3000				
R8	-15		200			40418	40428
R9	-24		470				
R10	-39		2000				
R11	-		SEE NOTE 3				
R12	-56		10K				
R13	-43		3000				
R14	-39		2000				
R15	-		SEE NOTE 3				
R16	-35		1300				
R17	-24		470				
R18	-		SEE NOTE 3				
R19	-32		1000				
~~R20~~	-						
R21	-24		470				
R22	-15		200				
R23	-49		5100				
C1	1006755-69	CAPACITOR	1 UF		35V		
C2							
C3							
CR1	1006751	DIODE					
CR2							
CR3							
CR4							
CR5							
CR6	1006838						
CR7	1006751						
CR8							
CR9							
CR10							
CR11							
Q1	1006753	TRANSISTOR				40410 THRU 40417	
Q2	1006753					40418 , 40428	
Q3	1006752						
Q4	1006752						
Q5	1006753						
Q6	1006752						
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427	
SA1	1006769	SENSE AMPL					

40420 THRU 40427

TABLE II

R11		R11	
PART NO.	VALUE	PART NO.	VALUE
1006750-15	200	1006750-31	910
-16	220	-32	1000
-17	240	-33	1100
-18	270	-34	1200
-19	300	-35	1300
-20	330	-36	1500
-21	360	-37	1600
-22	390	-38	1800
-23	430	-39	2000
-24	470	-40	2200
-25	510	-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
1006750-30	820	1006750-46	3900

TABLE I

COMPONENT PREFIX NO. (ASSY)	CIRCUIT NO.	A			B			C			D		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40410	SAF01	90	8	SBF01	100	6	40410A	80	2	SA01	110	4
2	40411	SAF02	91	7	SBF02	101	9	40411A	81	13	SA02	111	11
3	40412	SAF03	92	24	SBF03	102	22	40412A	82	18	SA03	112	20
4	40413	SAF04	93	23	SBF04	103	25	40413A	83	29	SA04	113	27
5	40414	SAF05	94	62	SBF05	104	60	40414A	84	54	SA05	114	56
6	40415	SAF06	95	61	SBF06	105	63	40415A	85	67	SA06	115	65
7	40416	SAF07	96	78	SBF07	106	76	40416A	86	70	SA07	116	72
8	40417	SAF08	97	77	SBF08	107	79	40417A	87	83	SA08	117	81
1	40420	SAF09	90	8	SBF09	100	6	40420A	80	2	SA09	110	4
2	40421	SAF10	91	7	SBF10	101	9	40421A	81	13	SA10	111	11
3	40422	SAF11	92	24	SBF11	102	22	40422A	82	18	SA11	112	20
4	40423	SAF12	93	23	SBF12	103	25	40423A	83	29	SA12	113	27
5	40424	SAF13	94	62	SBF13	104	60	40424A	84	54	SA13	114	56
6	40425	SAF14	95	61	SBF14	105	63	40425A	85	67	SA14	115	65
7	40426	SAF15	96	78	SBF15	106	76	40426A	86	70	SA15	116	72
8	40427	SAF16	97	77	SBF16	107	79	40427A	87	83	SA16	117	81

TABLE III

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

INACTIVE AFTER SYSTEM NO. 8.
FOR NEW PROCUREMENT USE
1006187

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II AND III
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE B14
5. CIRCUIT NO. 40410 THRU 40417 AND 40418 TO BE IN MODULE B13

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS

DRAWN A. Di Leo DATE [illegible]
CHECKED
APPROVAL Albert Hopkins
APPROVAL Eldon C. Hall
NASA APPROVAL
MIT APPROVAL

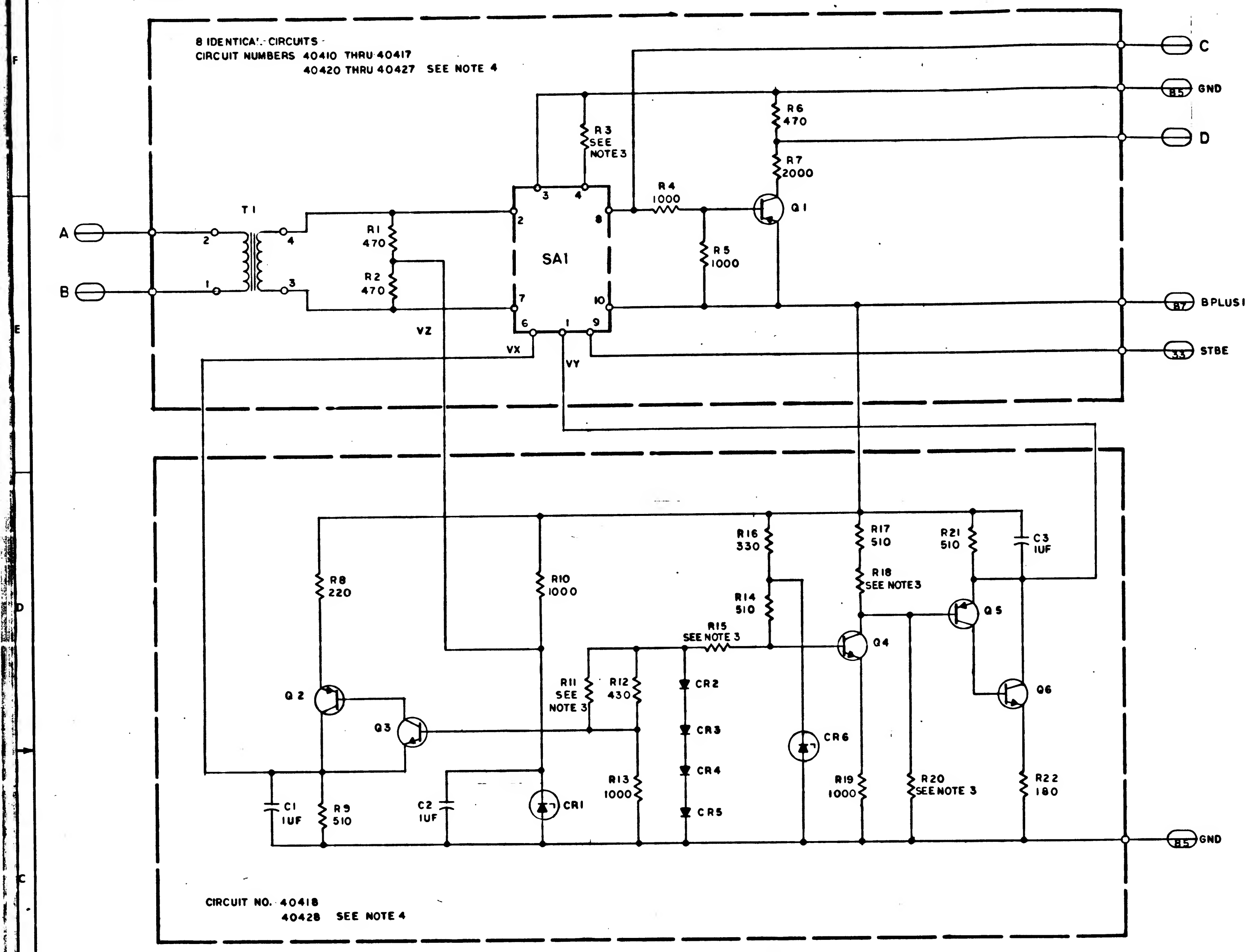
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE
SENSE AMPL MODULE B13-B14

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006118
SCALE —
WT —
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 01967 DATE 7/10/63

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 -24	RESISTOR	470	2%	1/4 W	40410 THRU 40417 40420 THRU 40427
R2	-24		470			
R3	-		SEE NOTE			
R4	-32		1000			
R5	-32		1000			
R6	-24		470			
R7	-39		2000			
R8	-16		220			
R9	-25		510			40418 , 40428
R10	-32		1000			
R11	-		SEE NOTE			
R12	-23		430			
R13	-32		1000			
R14	-25		510			
R15	-		SEE NOTE		1/4 W	
R16	1006760 - 20		330		1/2 W	
R17	1006750 - 25		510		1/4 W	
R18	-		SEE NOTE			
R19	-32		1000			
R20	-		SEE NOTE			
R21	-25		510			
R22	-14		180			
C1	1006755-68	CAPACITOR	1 UF		35 V	
C2						
C3						
CR1	1010372-7	DIODE				
CR2	1006751					
CR3						
CR4						
CR5	1006751					
CR6	1006838					
Q1	1006753	TRANSISTOR				40410 THRU 40417
Q2	1006753					40418 , 40428
Q3	1006752					
Q4	1006752					
Q5	1006753					
Q6	1006752					
T1	1006762	TRANSFORMER				40410 THRU 40417 40420 THRU 40427
SA1	1006769	SENSE AMPL				

40420 THRU 40427

R11		R11		R20		R20	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400	1006750-56	10K	1006750-72	47K
-26	560	-42	2700	-57	11K	-73	51K
-27	620	-43	3000	-58	12K	-74	56K
-28	680	-44	3300	-59	13K	-75	62K
-29	750	-45	3600	-60	15K	-76	68K
-30	820	-46	3900	-61	16K	-77	75K
-31	910	-47	4300	-62	18K	-78	82K
-32	1000	-48	4700	-63	20K	-79	91K
-33	1100	-49	5100	-64	22K	-80	100K
-34	1200	-50	5600	-65	24K	-81	110K
-35	1300	-51	6200	-66	27K	-82	120K
-36	1500	-52	6800	-67	30K	-83	130K
-37	1600	-53	7500	-68	33K	1006750-84	140K
-38	1800	-54	8200	-69	36K		
-39	2000	-55	9100	-70	39K		
1006750-40	2200	1006750-56	10K	1006750-71	43K		

CIRCUIT NO.	A			B			C			D		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40410	SAF01		8	SBF01		6	40410A		2	SA01		4
40411	SAF02		7	SBF02		9	40411A		13	SA02		11
40412	SAF03		24	SBF03		22	40412A		18	SA03		20
40413	SAF04		23	SBF04		25	40413A		29	SA04		27
40414	SAF05		62	SBF05		60	40414A		54	SA05		56
40415	SAF06		61	SBF06		63	40415A		67	SA06		65
40416	SAF07		78	SBF07		76	40416A		70	SA07		72
40417	SAF08		77	SBF08		79	40417A		83	SA08		81
40420	SAF09			SBF09			40420A			SA09		
40421	SAF10			SBF10			40421A			SA10		
40422	SAF11			SBF11			40422A			SA11		
40423	SAF12			SBF12			40423A			SA12		
40424	SAF13			SBF13			40424A			SA13		
40425	SAF14			SBF14			40425A			SA14		
40426	SAF15			SBF15			40426A			SA15		
40427	SAF16			SBF16			40427A			SA16		

SEE NOTE 4 (40420 – 40427)

R3		R15		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750 - 1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED,
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R3, R11, R15, R18, R20 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES
4. CIRCUIT NO. 40420 THRU 40427 AND 40428 TO BE IN MODULE NO. 2

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN A. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins 7/10
APPROVAL Eldon C. Hall 10 July 63
NASA APPROVAL
MIT APPROVAL R. B. Trageser 7/10

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ERASABLE SENSE AMPL MODULE

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006118
SCALE — WT — SHEET 1 OF 1

1006118

MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

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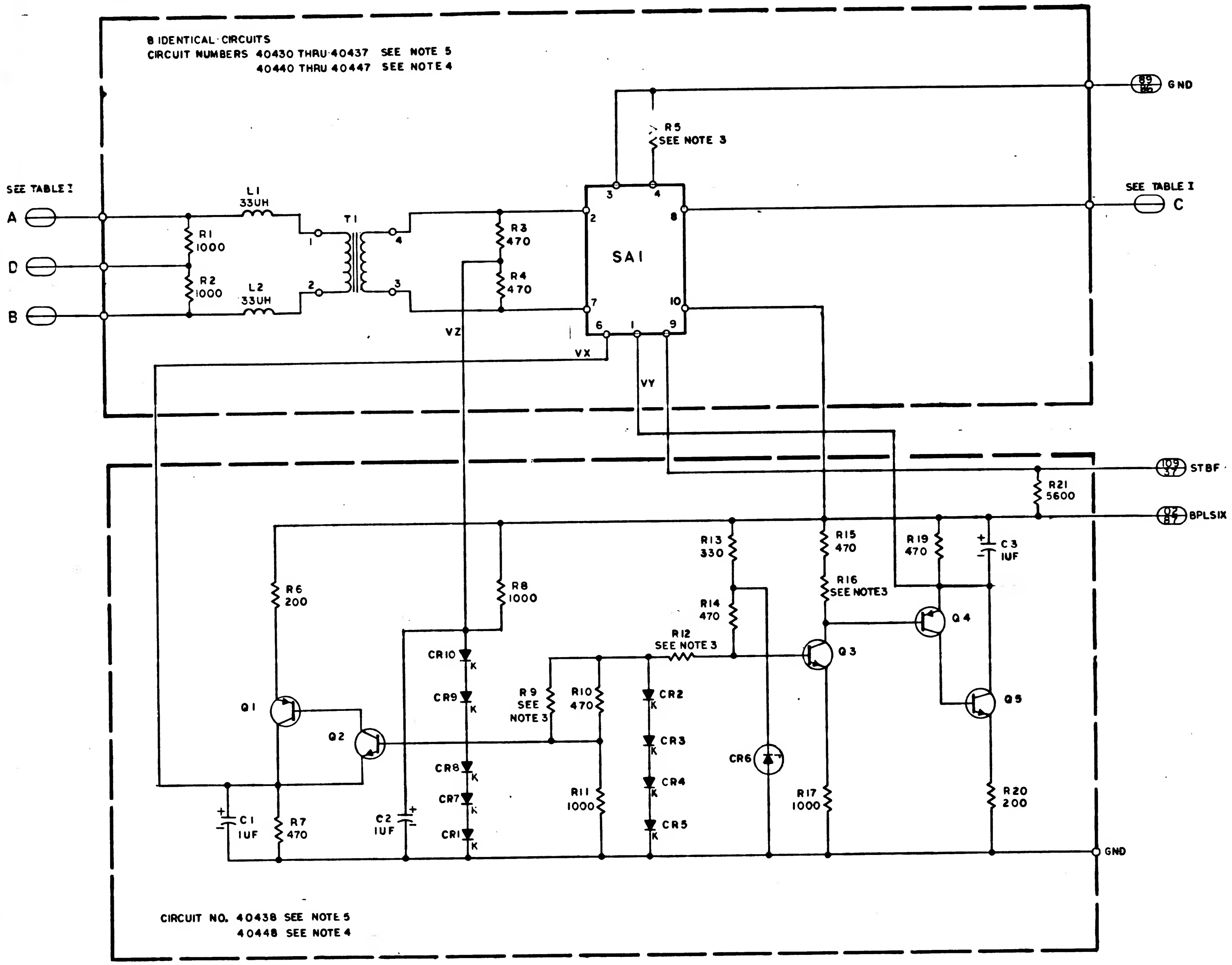
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A PER TDRR 63/29	9-12-63	EPK WK



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 - 32	RESISTOR	1000	2%	1/4 W	40430 THRU 40437 40440 THRU 40447
R2	- 32		1000			
R3	- 24		470			
R4	- 24		470			
R5	-		SEE NOTE 3			
R6	- 15		200			40438, 40448
R7	- 24		470			
R8	- 32		1000			
R9	-		SEE NOTE 3			
R10	- 24		470			
R11	- 32		1000			
R12	↓ -		SEE NOTE 3		↓	
R13	1006760 - 20		330		1/2 W	
R14	1006750 - 24		470		1/4 W	
R15	- 24		470			
R16	-		SEE NOTE 3			
R17	- 32		1000			
~~R18~~	-					
R19	- 24		470			
R20	- 14		180			
R21	↓ - 50	↓	5600	↓	↓	
C1	1006755 - 68	CAPACITOR	1 UF		35V	
C2	- 68					
C3	↓ - 68	↓	↓		↓	↓ ↓
L1	1010406 - 13	COIL	33 UH			40430 THRU 40437
L2	1010406 - 13	↓	33 UH			40440 THRU 40447
CR1	1006751	DIODE				
CR2						
CR3						
CR4						40438, 40448
CR5	↓					
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10	↓	↓				
Q1	1006753	TRANSISTOR				
Q2	1006752					
Q3	1006752					
Q4	1006753					
Q5	1006752	↓				↓ ↓
T1	1006762	TRANSFORMER				40430 THRU 40437
SA1	1006769	SENSE AMPL				40440 THRU 40447

TABLE III

R9		R9	
PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
-30	820	-46	3900
-31	910	-47	4300
-32	1000	-48	4700
-33	1100	-49	5100
-34	1200	-50	5600
-35	1300	-51	6200
-36	1500	-52	6800
-37	1600	-53	7500
-38	1800	-54	8200
↓ -39	2000	↓ -55	9100
1006750-40	2200	1006750-56	10 K

TABLE II

R5		R12		R16	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	↓ -48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
↓ -48	4700	↓ -24	470		
1006750-49	5100	1006750-25	510		

TABLE I

CIRCUIT NO.	A			B			C			D			COMPONENT PREFIX NO. (ASSY)
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	
40430	GAR01	90	04	GBR01	100	06	40410A	110	02	+ 3 MZ	80	01	2
40431	GAR02	91	11	GBR02	101	09	40411A	111	13			16	1
40432	GAR03	92	20	GBR03	102	22	40412A	112	18			17	4
40433	GAR04	93	27	GBR04	103	25	40413A	113	29			32	3
40434	GAR05	94	58	GBR05	104	60	40414A	114	54			53	6
40435	GAR06	95	65	GBR06	105	63	40415A	115	67			68	5
40436	GAR07	96	74	GBR07	106	76	40416A	116	70	↓	↓	69	8
40437	GAR08	97	81	GBR08	107	79	40417A	117	83	+ 3 MZ	80	84	7
40440	GAR09	90	04	GBR09	100	06	40420A	110	02	+ 3 MZ	80	01	2
40441	GAR10	91	11	GBR10	101	09	40421A	111	13			16	1
40442	GAR11	92	20	GBR11	102	22	40422A	112	18			17	4
40443	GAR12	93	27	GBR12	103	25	40423A	113	29			32	3
40444	GAR13	94	58	GBR13	104	60	40424A	114	54			53	6
40445	GAR14	95	65	GBR14	105	63	40425A	115	67			68	5
40446	GAR15	96	74	GBR15	106	76	40426A	116	70	↓	↓	69	8
40447	GAR16	97	81	GBR16	107	79	40427A	117	83	+ 3 MZ	80	84	7

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED:
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R5, R9, R12, R16 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II, III
4. CIRCUIT NO. 40440 THRU 40447 AND 40448 TO BE IN MODULE B27
5. CIRCUIT NO. 40430 THRU 40437 AND 40438 TO BE IN MODULE B26

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN G. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C. Hall
NASA APPROVAL
MIT APPROVAL M B Trageser

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

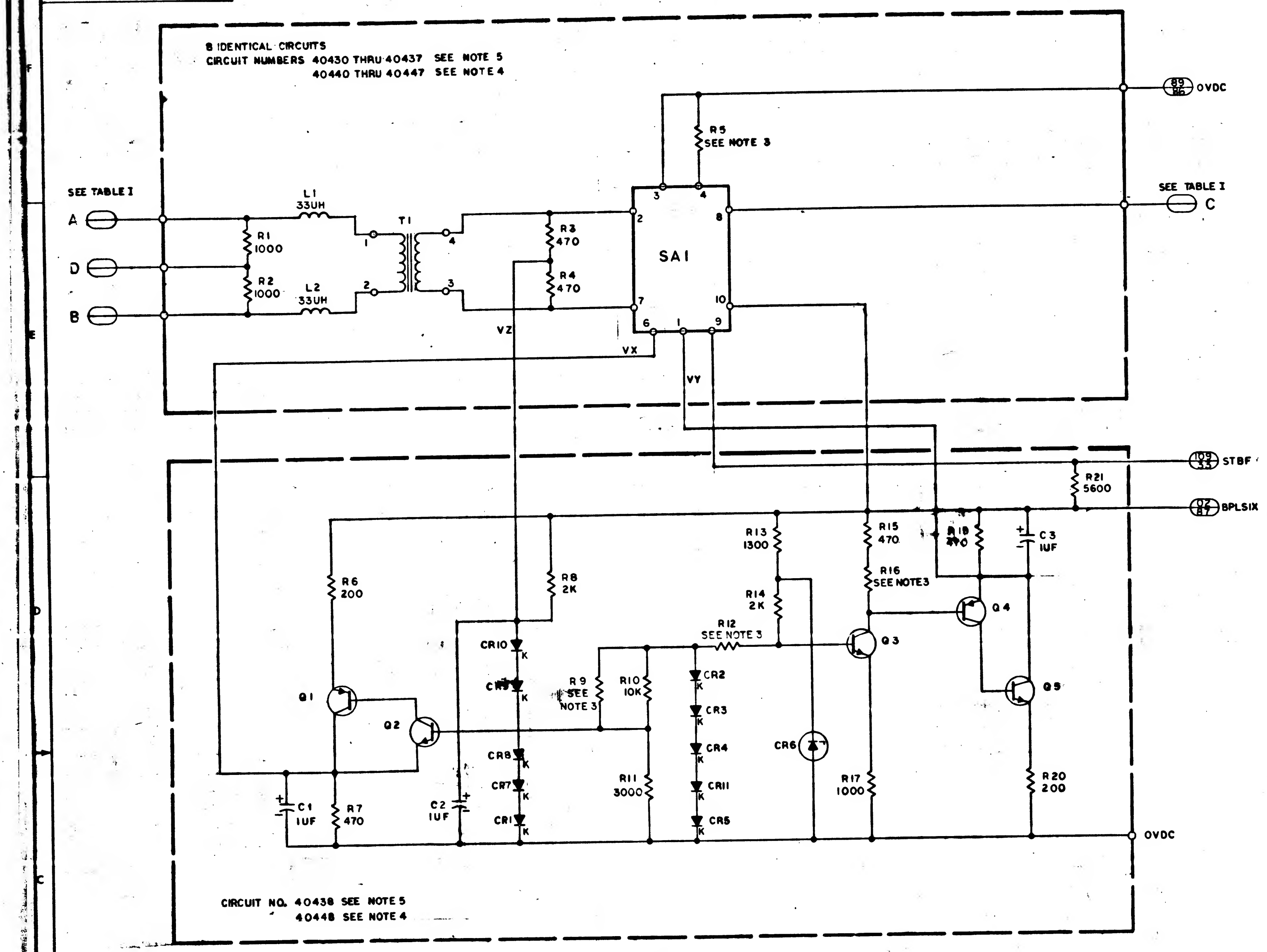
SCHEMATIC, ROPE
SENSE AMPL MODULE B26-B27

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006119
SCALE —
WT —
SHEET 1 OF 1

1006119 A

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A PER TDRR 63129		WH
B	REVISED PER TDRR 03446		



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 - 32	RESISTOR	1000	2%	1/4 W	40430 THRU 40437 40440 THRU 40447
R2	- 32		1000			
R3	- 24		470			
R4	- 24		470			
R5	-		SEE NOTE 3			
R6	- 15		200			40438, 40448
R7	- 24		470			
R8	- 39		2K			
R9	-		SEE NOTE 3			
R10	- 56		10K			
R11	- 43		3K			
R12	-		SEE NOTE 3			
R13	- 35		1300			
R14	- 39		2K			
R15	- 24		470			
R16	-		SEE NOTE 3			
R17	- 32		1000			
~~R18~~	-					
R19	- 24		470			
R20	- 15		200			
R21	- 50		5600			
C1	1006755 - 69	CAPACITOR	1 UF		35V	
C2	- 69					
C3	- 69					
L1	1010406 - 13	COIL	33 UH			40430 THRU 40437
L2	1010406 - 13		33 UH			40440 THRU 40447
CR1	1006751	DIODE				
CR2						
CR3						
CR4						40438, 40448
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				
Q2	1006752					
Q3	1006752					
Q4	1006753					
Q5	1006752					
T1	1006762	TRANSFORMER				40430 THRU 40437
SA1	1006769	SENSE AMPL				40440 THRU 40447

TABLE III

R9		R9	
PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
-30	820	-46	3900
-31	910	-47	4300
-32	1000	-48	4700
-33	1100	-49	5100
-34	1200	-50	5600
-35	1300	-51	6200
-36	1500	-52	6800
-37	1600	-53	7500
-38	1800	-54	8200
-39	2000	-55	9100
1006750-40	2200	1006750-56	10 K

TABLE II

R5		R12		R16	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

TABLE I

CIRCUIT NO.	A			B			C			D			COMPONENT PREFIX NO. (ASSY)
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	
40430	GAR01	90	04	GBR01	100	06	40410A	110	02	+ 3 MZ	80	01	2
40431	GAR02	91	11	GBR02	101	09	40411A	111	13			16	1
40432	GAR03	92	20	GBR03	102	22	40412A	112	18			17	4
40433	GAR04	93	27	GBR04	103	25	40413A	113	29			32	3
40434	GAR05	94	58	GBR05	104	60	40414A	114	54			53	6
40435	GAR06	95	65	GBR06	105	63	40415A	115	67			68	5
40436	GAR07	96	74	GBR07	106	76	40416A	116	70			69	8
40437	GAR08	97	81	GBR08	107	79	40417A	117	83	+ 3 MZ	80	84	7
40440	GAR09	90	04	GBR09	100	06	40420A	110	02	+ 3 MZ	80	01	2
40441	GAR10	91	11	GBR10	101	09	40421A	111	13			16	1
40442	GAR11	92	20	GBR11	102	22	40422A	112	18			17	4
40443	GAR12	93	27	GBR12	103	25	40423A	113	29			32	3
40444	GAR13	94	58	GBR13	104	60	40424A	114	54			53	6
40445	GAR14	95	65	GBR14	105	63	40425A	115	67			68	5
40446	GAR15	96	74	GBR15	106	76	40426A	116	70			69	8
40447	GAR16	97	81	GBR16	107	79	40427A	117	83	+ 3 MZ	80	84	7

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED:
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R5, R9, R12, R16 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II, III
4. CIRCUIT NO. 40440 THRU 40447 AND 40448 TO BE IN MODULE B27
5. CIRCUIT NO. 40430 THRU 40437 AND 40438 TO BE IN MODULE B26

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN G. Di Leo DATE
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C. Hall
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

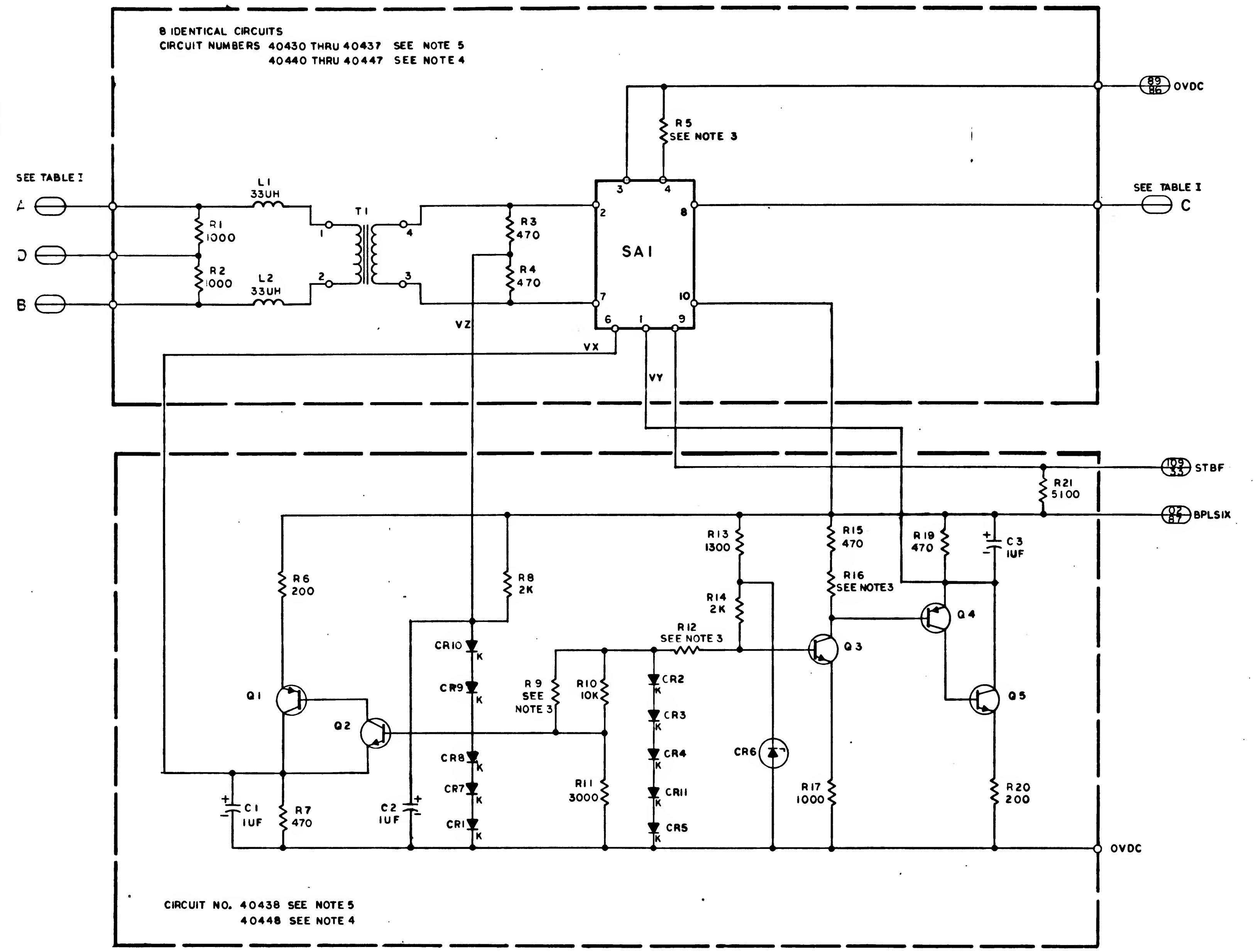
SCHEMATIC, ROPE SENSE AMPL MODULE B26-B27

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006119
SCALE — WT — SHEET 1 OF 1

1006119 B

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A PER TDRR 63129	9-12-63	EPK WK
B	REVISED PER TDRR 63446	9-26-63	[illegible]
C	REVISED PER TDRR 03847	10-10-63	EPK WK



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 - 32	RESISTOR	1000	2%	1/4 W	
R2	- 32		1000			40430 THRU 40437
R3	- 24		470			
R4	- 24		470			40440 THRU 40447
R5	-		SEE NOTE 3			
R6	- 15		200			40438, 40448
R7	- 24		470			
R8	- 39		2K			
R9	-		SEE NOTE 3			
R10	- 56		10K			
R11	- 43		3K			
R12	-		SEE NOTE 3			
R13	- 35		1300			
R14	- 39		2K			
R15	- 24		470			
R16	-		SEE NOTE 3			
R17	- 32		1000			
~~R18~~	-					
R19	- 24		470			
R20	- 15		200			
R21	- 49		5100			
C1	1006755 - 69	CAPACITOR	1 UF		35V	
C2	- 69					
C3	- 69					
L1	1010406 - 13	COIL	33 UH			40430 THRU 40437
L2	1010406 - 13		33 UH			40440 THRU 40447
CR1	1006751	DIODE				
CR2						
CR3						
CR4						40438, 40448
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				
Q2	1006752					
Q3	1006752					
Q4	1006753					
Q5	1006752					
T1	1006762	TRANSFORMER				40430 THRU 40437
SA1	1006769	SENSE AMPL				40440 THRU 40447

TABLE III

R9		R9	
PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400
-26	560	-42	2700
-27	620	-43	3000
-28	680	-44	3300
-29	750	-45	3600
-30	820	-46	3900
-31	910	-47	4300
-32	1000	-48	4700
-33	1100	-49	5100
-34	1200	-50	5600
-35	1300	-51	6200
-36	1500	-52	6800
-37	1600	-53	7500
-38	1800	-54	8200
-39	2000	-55	9100
1006750-40	2200	1006750-56	10 K

TABLE II

R5		R12		R16	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

TABLE I

CIRCUIT NO.	A			B			C			D			COMPONENT PREFIX NO. (ASSY)
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	
40430	GAR01	90	04	GBR01	100	06	40410A	110	13	+ 3 MZ	80	01	2
40431	GAR02	91	11	GBR02	101	09	40411A	111	02			16	1
40432	GAR03	92	20	GBR03	102	22	40412A	112	29			17	4
40433	GAR04	93	27	GBR04	103	25	40413A	113	18			32	3
40434	GAR05	94	58	GBR05	104	60	40414A	114	67			53	6
40435	GAR06	95	65	GBR06	105	63	40415A	115	54			68	5
40436	GAR07	96	74	GBR07	106	76	40416A	116	83			69	8
40437	GAR08	97	81	GBR08	107	79	40417A	117	70	+ 3 MZ	80	84	7
40440	GAR09	90	04	GBR09	100	06	40420A	110	13	+ 3 MZ	80	01	2
40441	GAR10	91	11	GBR10	101	09	40421A	111	02			16	1
40442	GAR11	92	20	GBR11	102	22	40422A	112	29			17	4
40443	GAR12	93	27	GBR12	103	25	40423A	113	18			32	3
40444	GAR13	94	58	GBR13	104	60	40424A	114	67			53	6
40445	GAR14	95	65	GBR14	105	63	40425A	115	54			68	5
40446	GAR15	96	74	GBR15	106	76	40426A	116	83			69	8
40447	GAR16	97	81	GBR16	107	79	40427A	117	70	+ 3 MZ	80	84	7

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED:
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R5, R9, R12, R16 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II, III
4. CIRCUIT NO. 40440 THRU 40447 AND 40448 TO BE IN MODULE B27
5. CIRCUIT NO. 40430 THRU 40437 AND 40438 TO BE IN MODULE B26

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN G. Di Leo DATE [illegible]
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C. Hall 10 July 63
NASA APPROVAL [illegible]
MIT APPROVAL M. B. Trageser 7/10/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ROPE
SENSE AMPL MODULE B26-B27

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006119
SCALE —
WT —
SHEET 1 OF 1

1006119 C

INCHES
PHOTOGRAPHIC SCALE ONLY

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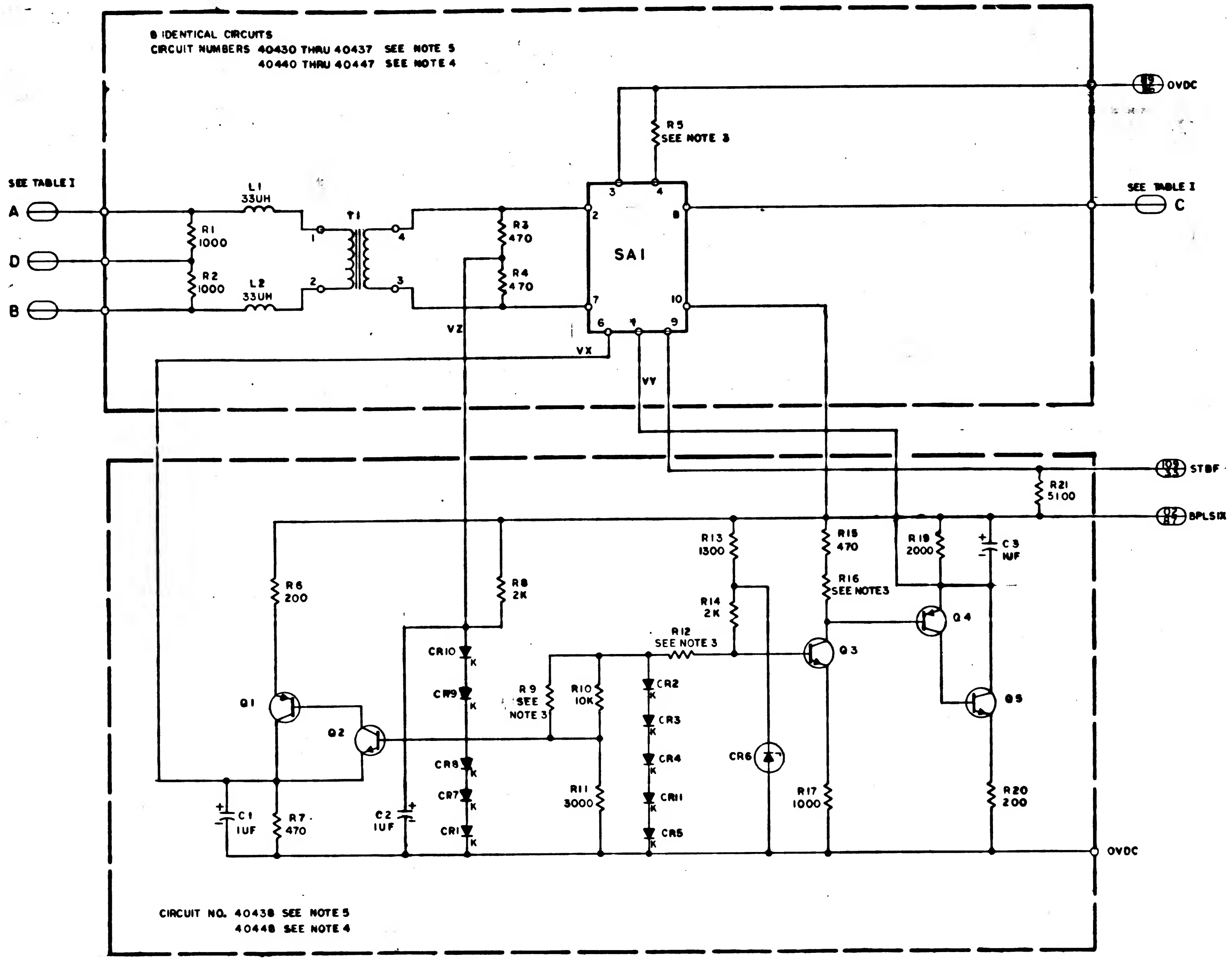
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED AND UPGRADED TO CLASS A PER TDRR 63129	7-12-63	WK
B	REVISED PER TDRR 03446		
C	REVISED PER TDRR 03847		WK
D	REVISED PER TDRR 11325 DR J.P. Samuels CHK	9/24/64	

8 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40430 THRU 40437 SEE NOTE 5
40440 THRU 40447 SEE NOTE 4



CIRCUIT NO. 40438 SEE NOTE 5
40448 SEE NOTE 4

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 - 32	RESISTOR	1000	2%	1/4 W	
R2	- 32		1000			40430THRU40437
R3	- 24		470			
R4	- 24		470			40440 THRU 40447
R5	-		SEE NOTE 3			
R6	- 15		200			40438, 40448
R7	- 24		470			
R8	- 39		2K			
R9	-		SEE NOTE 3			
R10	-56		10K			
R11	-43		3K			
R12	-		SEE NOTE 3			
R13	- 35		1300			
R14	- 39		2K			
R15	- 24		470			
R16	-		SEE NOTE 3			
R17	- 32		1000			
~~R18~~	-					
R19	- 39		2000			
R20	- 15		200			
R21	- 49		5100			
C1	1006755 - 69	CAPACITOR	1 UF		35V	
C2	- 69					
C3	- 69					
L1	1010406 - 13	COIL	33 UH			40430 THRU 40437
L2	1010406 - 13		33 UH			40440 THRU 40447
CR1	1006751	DIODE				
CR2						
CR3						
CR4						40438, 40448
CR5						
CR6	1006838					
CR7	1006751					
CR8						
CR9						
CR10						
CR11						
Q1	1006753	TRANSISTOR				
Q2	1006752					
Q3	1006752					
Q4	1006753					
Q5	1006752					
T1	1006762	TRANSFORMER				40430 THRU 40437
SA1	1006769	SENSE AMPL				40440 THRU 40447

TABLE III

R9		R9		R9	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400	1006750 -15	200
-26	560	-42	2700	-16	220
-27	620	-43	3000	-17	240
-28	680	-44	3300	-18	270
-29	750	-45	3600	-19	300
-30	820	-46	3900	-20	330
-31	910	-47	4300	-21	360
-32	1000	-48	4700	-22	390
-33	1100	-49	5100	-23	430
-34	1200	-50	5600	1006750 -24	470
-35	1300	-51	6200		
-36	1500	-52	6800		
-37	1600	-53	7500		
-38	1800	-54	8200		
-39	2000	-55	9100		
1006750-40	2200	1006750-56	10 K		

TABLE II

R5		R12		R16	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750 - 1	51	1006750-32	1000
-26	560	- 2	56	-33	1100
-27	620	- 3	62	-34	1200
-28	680	- 4	68	-35	1300
-29	750	- 5	75	-36	1500
-30	820	- 6	82	-37	1600
-31	910	- 7	91	-38	1800
-32	1000	- 8	100	-39	2000
-33	1100	- 9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300	-25	510
-44	3300	-20	330	-26	560
-45	3600	-21	360	-27	620
-46	3900	-22	390	-28	680
-47	4300	-23	430	-29	750
-48	4700	-24	470	-30	820
1006750-49	5100	1006750-25	510	1006750 -31	910
-15	200				
-16	220				
-17	240				
-18	270				
-19	300				
-20	330				
-21	360				
-22	390				
-23	430				
1006750 -24	470				

TABLE I

CIRCUIT NO.	A			B			C			D			COMPONENT PREFIX NO. (ASSY)
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	
40430	GAR01	90	04	GBR01	100	06	40410A	110	13	+ 3 MZ	80	01	2
40431	GAR02	91	11	GBR02	101	09	40411 A	111	02			16	1
40432	GAR03	92	20	GBR03	102	22	40412 A	112	29			17	4
40433	GAR04	93	27	GBR C4	103	25	40413 A	113	18			32	3
40434	GAR05	94	58	GBR05	104	60	40414 A	114	67			53	6
40435	GAR06	95	65	GBR06	105	63	40415A	115	54			68	5
40436	GAR07	96	74	GBR07	106	76	40416A	116	83			69	8
40437	GAR08	97	81	GBR08	107	79	40417A	117	70	+ 3 MZ	80	84	7
40440	GAR09	90	04	GBR09	100	06	40420A	110	13	+ 3 MZ	80	01	2
40441	GAR10	91	11	GBR10	101	09	40421 A	111	02			16	1
40442	GAR11	92	20	GBR11	102	22	40422A	112	29			17	4
40443	GAR12	93	27	GBR12	103	25	40423A	113	18			32	3
40444	GAR13	94	58	GBR13	104	60	40424A	114	67			53	6
40445	GAR14	95	65	GBR14	105	63	40425A	115	54			68	5
40446	GAR15	96	74	GBR15	106	76	40426A	116	83			69	8
40447	GAR16	97	81	GBR16	107	79	40427A	117	70	+ 3 MZ	80	84	7

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED:
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R5, R9, R12, R16 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES II, III
4. CIRCUIT NO. 40440 THRU 40447 AND 40448 TO BE IN MODULE B27
5. CIRCUIT NO. 40430 THRU 40437 AND 40438 TO BE IN MODULE B26

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN DATE
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL
NASA APPROVAL
MIT APPROVAL

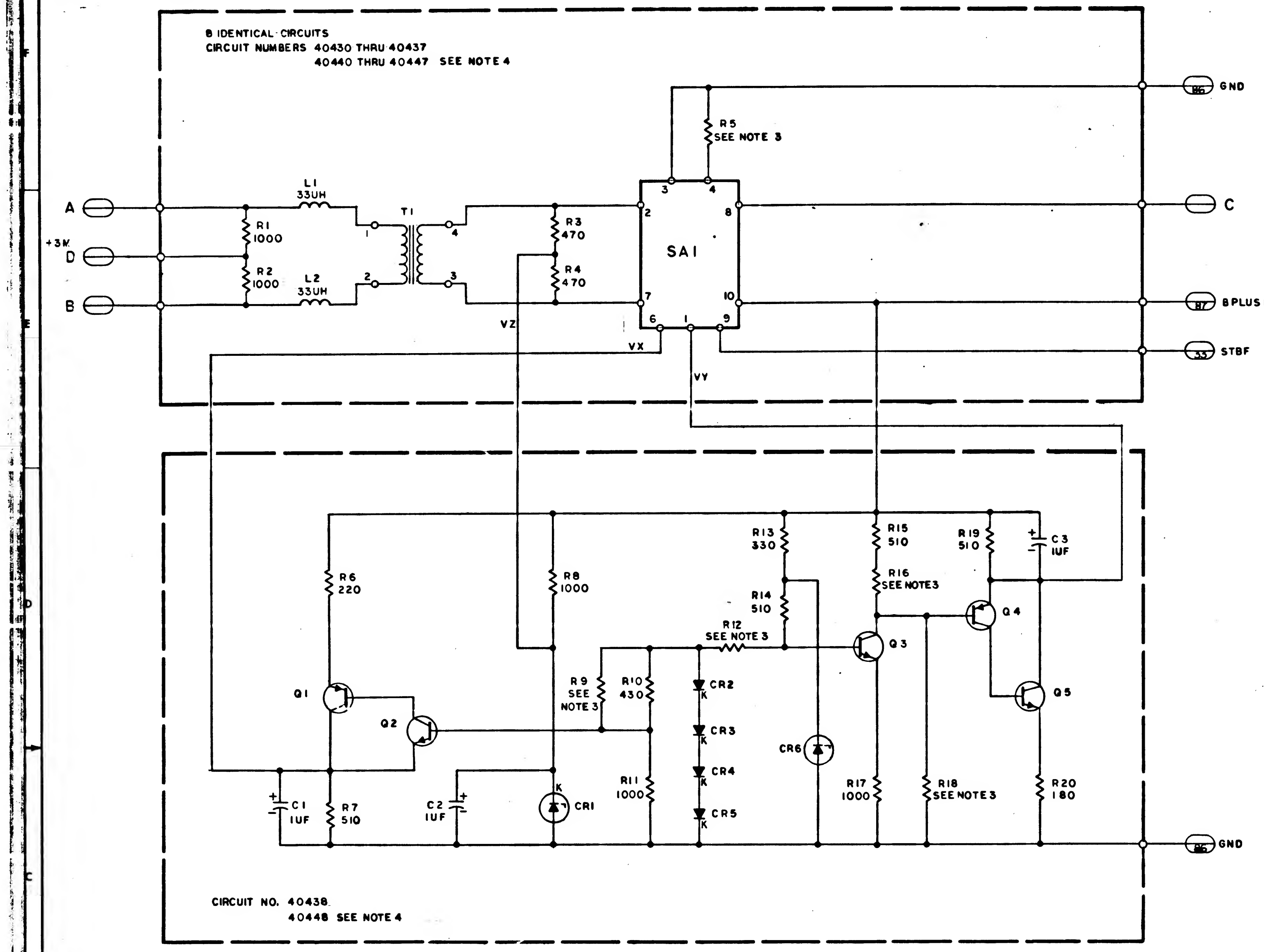
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ROPE SENSE AMPL MODULE B26-B27

CODE IDENT NO. — SIZE E NASA DRAWING NO. 1006119
SCALE — WT — SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CKT NO. USED ON
R1	1006750 - 32	RESISTOR	1000	2%	1/4 W	
R2	- 32		1000			40430 THRU 40437
R3	- 24		470			
R4	- 24		470			40440 THRU 40447
R5	-		SEE NOTE			
R6	- 16		220			40438, 40448
R7	- 25		510			
R8	- 32		1000			
R9	-		SEE NOTE			
R10	- 23		430			
R11	- 32		1000			
R12	-		SEE NOTE			
R13	1006760 - 20		330		1/2 W	
R14	1006750 - 25		510		1/4 W	
R15	- 25		510			
R16	-		SEE NOTE			
R17	- 32		1000			
R18	-		SEE NOTE			
R19	- 25		510			
R20	- 14		180		1/4 W	
C1	1006755 - 68	CAPACITOR	1 UF		35V	
C2	- 68					
C3	- 68					
L1	1010406 - 13	COIL	33 UH			40430 THRU 40437
L2	1010406 - 13		33 UH			40440 THRU 40447
CR1	1010372 - 7	DIODE				40438, 40448
CR2	1006751					
CR3						
CR4						
CR5	1006751					
CR6	1006838					
Q1	1006753	TRANSISTOR				
Q2	1006752					
Q3	1006752					
Q4	1006753					
Q5	1006752					
T1	1006752	TRANSFORMER				40430 THRU 40437
SA1	1006769	SENSE AMPL				40440 THRU 40447

R9		R9		R18		R18	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-41	2400	1006750-56	10K	1006750-72	47K
-26	560	-42	2700	-57	11K	-73	51K
-27	620	-43	3000	-58	12K	-74	56K
-28	680	-44	3300	-59	13K	-75	62K
-29	750	-45	3600	-60	15K	-76	68K
-30	820	-46	3900	-61	16K	-77	75K
-31	910	-47	4300	-62	18K	-78	82K
-32	1000	-48	4700	-63	20K	-79	91K
-33	1100	-49	5100	-64	22K	-80	100K
-34	1200	-50	5600	-65	24K	-81	110K
-35	1300	-51	6200	-66	27K	-82	120K
-36	1500	-52	6800	-67	30K	-83	130K
-37	1600	-53	7500	-68	33K	1006750-84	140K
-38	1800	-54	8200	-69	36K		
-39	2000	-55	9100	-70	39K		
1006750-40	2200	1006750-56	10K	1006750-71	43K		

R5		R12		R16	
PART NO.	VALUE	PART NO.	VALUE	PART NO.	VALUE
1006750-25	510	1006750-1	51	1006750-32	1000
-26	560	-2	56	-33	1100
-27	620	-3	62	-34	1200
-28	680	-4	68	-35	1300
-29	750	-5	75	-36	1500
-30	820	-6	82	-37	1600
-31	910	-7	91	-38	1800
-32	1000	-8	100	-39	2000
-33	1100	-9	110	-40	2200
-34	1200	-10	120	-41	2400
-35	1300	-11	130	-42	2700
-36	1500	-12	150	-43	3000
-37	1600	-13	160	-44	3300
-38	1800	-14	180	-45	3600
-39	2000	-15	200	-46	3900
-40	2200	-16	220	-47	4300
-41	2400	-17	240	-48	4700
-42	2700	-18	270	1006750-49	5100
-43	3000	-19	300		
-44	3300	-20	330		
-45	3600	-21	360		
-46	3900	-22	390		
-47	4300	-23	430		
-48	4700	-24	470		
1006750-49	5100	1006750-25	510		

CIRCUIT NO.	A			B			C			D		
	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
40430	GAR01		4	GBR01		6	40410A		2	+ 3M		1
40431	GAR02		11	GBR02		9	40411A		13			16
40432	GAR03		20	GBR03		22	40412A		18			17
40433	GAR04		27	GBR04		25	40413A		29			32
40434	GAR05		58	GBR05		60	40414A		54			53
40435	GAR06		65	GBR06		63	40415A		67			68
40436	GAR07		74	GBR07		76	40416A		70			69
40437	GAR08		81	GBR08		79	40416A		85	+ 3M		84
40440	GAR09			GBR09			40420A			+ 3M		
40441	GAR10			GBR10			40421A					
40442	GAR11			GBR11			40422A					
40443	GAR12			GBR12			40423A					
40444	GAR13			GBR13			40424A					
40445	GAR14			GBR14			40425A					
40446	GAR15			GBR15			40426A					
40447	GAR16			GBR16			40427A			+ 3M		

SEE NOTE 4

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED:
   RESISTOR VALUES ARE IN OHMS
   CAPACITOR VALUES ARE IN MICROFARADS
3. THE VALUE OF R5, R9, R12, R16, R18 TO BE DETERMINED BY ELECTRICAL TEST. SEE TABLES
4. CIRCUIT NO. 40440 THRU 40447 AND 40448 TO BE IN MODULE NO. 2

FOR INFORMATION ONLY

CLASS B RELEASE TDR No. 01967 DATE 7/1963

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
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FINAL FINISH —

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DRAWN DATE
CHECKED
APPROVAL Albert Hopkins 7-10
APPROVAL Eldon C. Hall 12 July 63
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, ROPE SENSE AMPL MODULE

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006119
SCALE — WT — SHEET 1 OF 1

INCHES
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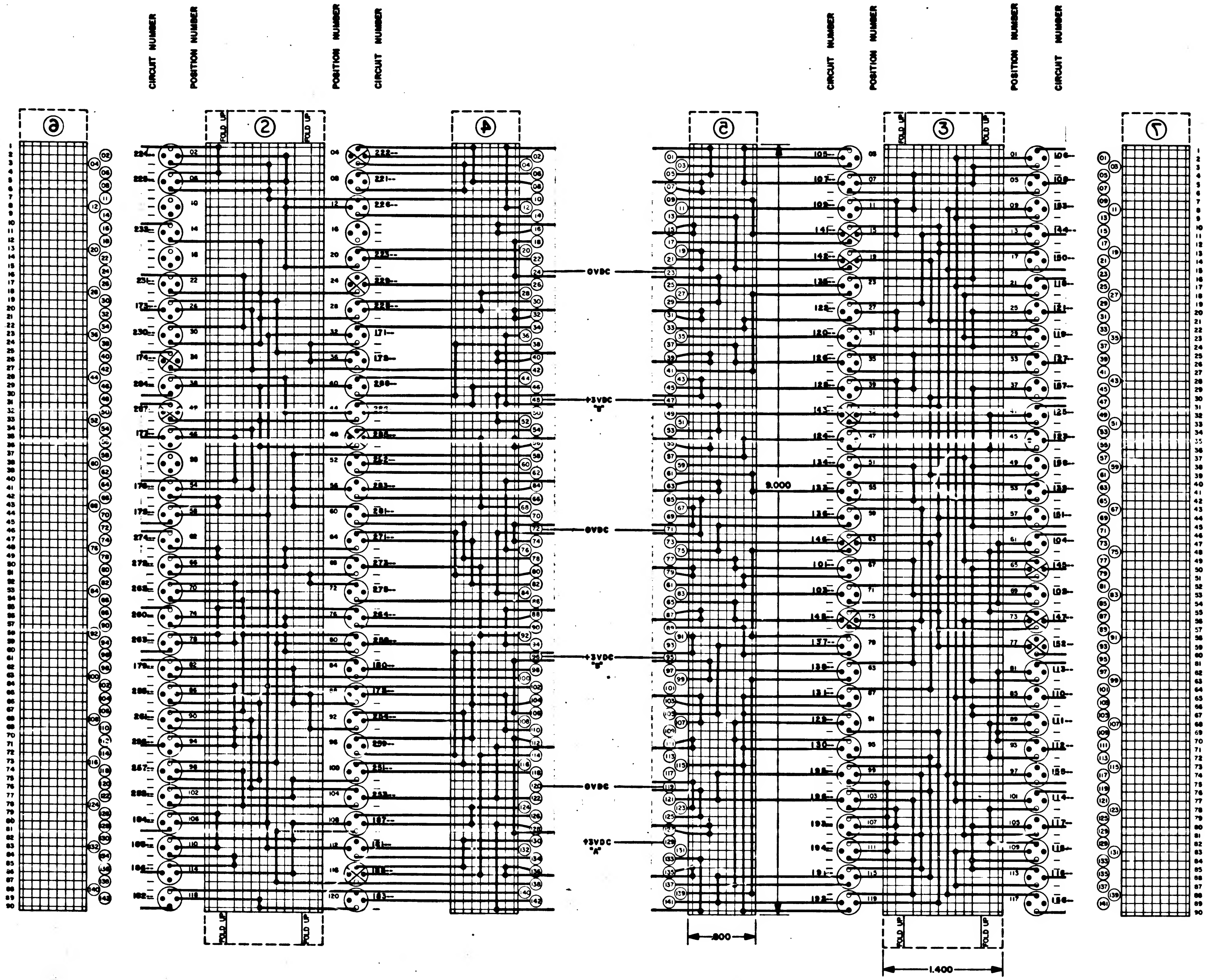
SYM	DESCRIPTION	DATE	APPROVAL
REVISIONS			



REF. DWG.
1. LOGIC FLOW DIAGRAM 1004170

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT' (+3V DC LEAD NOT CONNECTED) } REFER TO DWG. NO. 1006013

3- ○ DENOTES "NOR" CIRCUIT } REFER TO DWG. NO. 1006013

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
—
FINAL FINISH
—

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Cambridge Mass
DWG NO CONTRACT

DRAWN Mahoney DATE 2-7-63
CHECKED H. Tchelo 1/5/63
APPROVAL 4 Jun 63
APPROVAL 4 Jun 63
NASA APPROVAL W J Rhine 6-5-63
MIT APPROVAL 4 Jun 63

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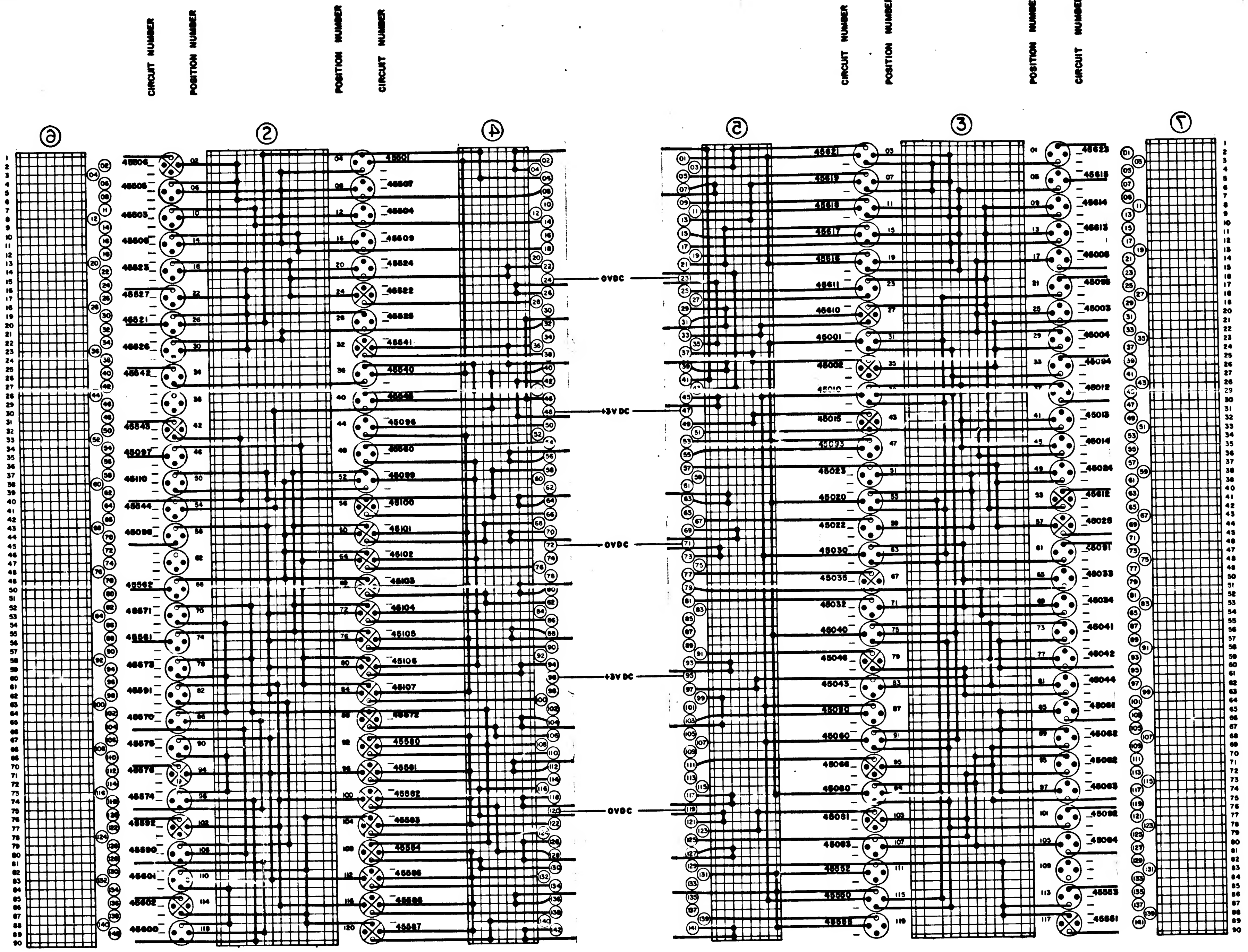
WIRING DIAGRAM
LOGIC MODULE NO.

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006120
SCALE 2/1
WT
SHEET 1 OF 1

1006120

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO

REVISIONS 02394			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006541

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ⊙ DENOTES "NOR" CIRCUIT

REFER TO DWG. NO. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

MIT
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DRAWN A. D. Lee DATE 1-8-63
CHECKED
APPROVAL 8/6/63
APPROVAL 8/7/63
NASA APPROVAL 8/7/63
MIT APPROVAL 8/7/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-35

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006121
SCALE 2/1
WT
SHEET 1 OF 1

1006121

INCHES
PHOTOGRAPHIC SCALE ONLY

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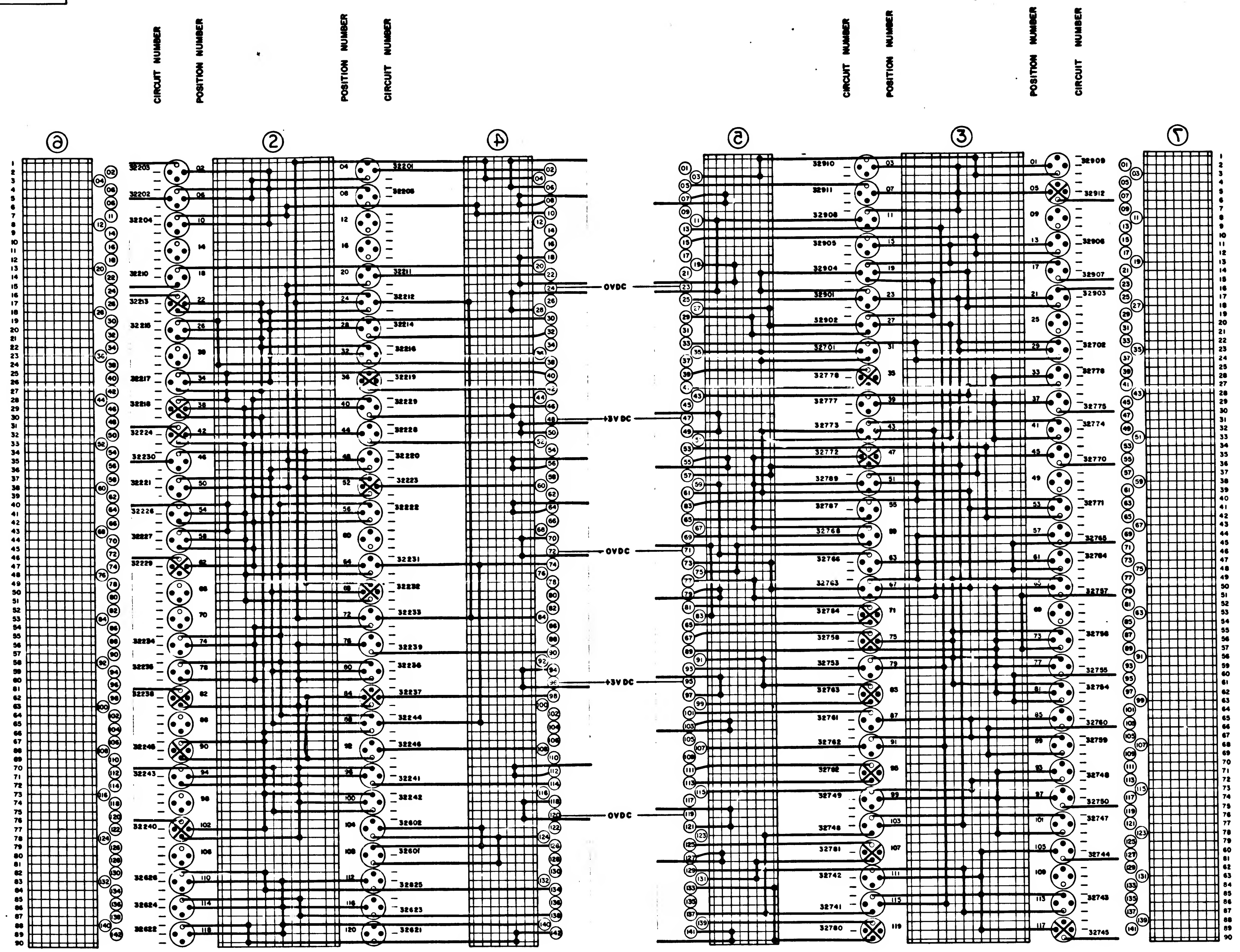
SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS



REF. DWG.
LLOGIC FLOW DIAGRAM 1006542

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013

3- ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
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DWG NO CONTRACT
DRAWN DATE
CHECKED 6/27/63
APPROVAL W B Turner
APPROVAL
NASA APPROVAL 7/1/63
MIT APPROVAL

MANNED SPACECRAFT CENTER
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SIGNAL WIRING DIAGRAM

LOGIC MODULE NO. A18

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006122
SCALE
WT
SHEET 1 OF 1

1006122

INCHES
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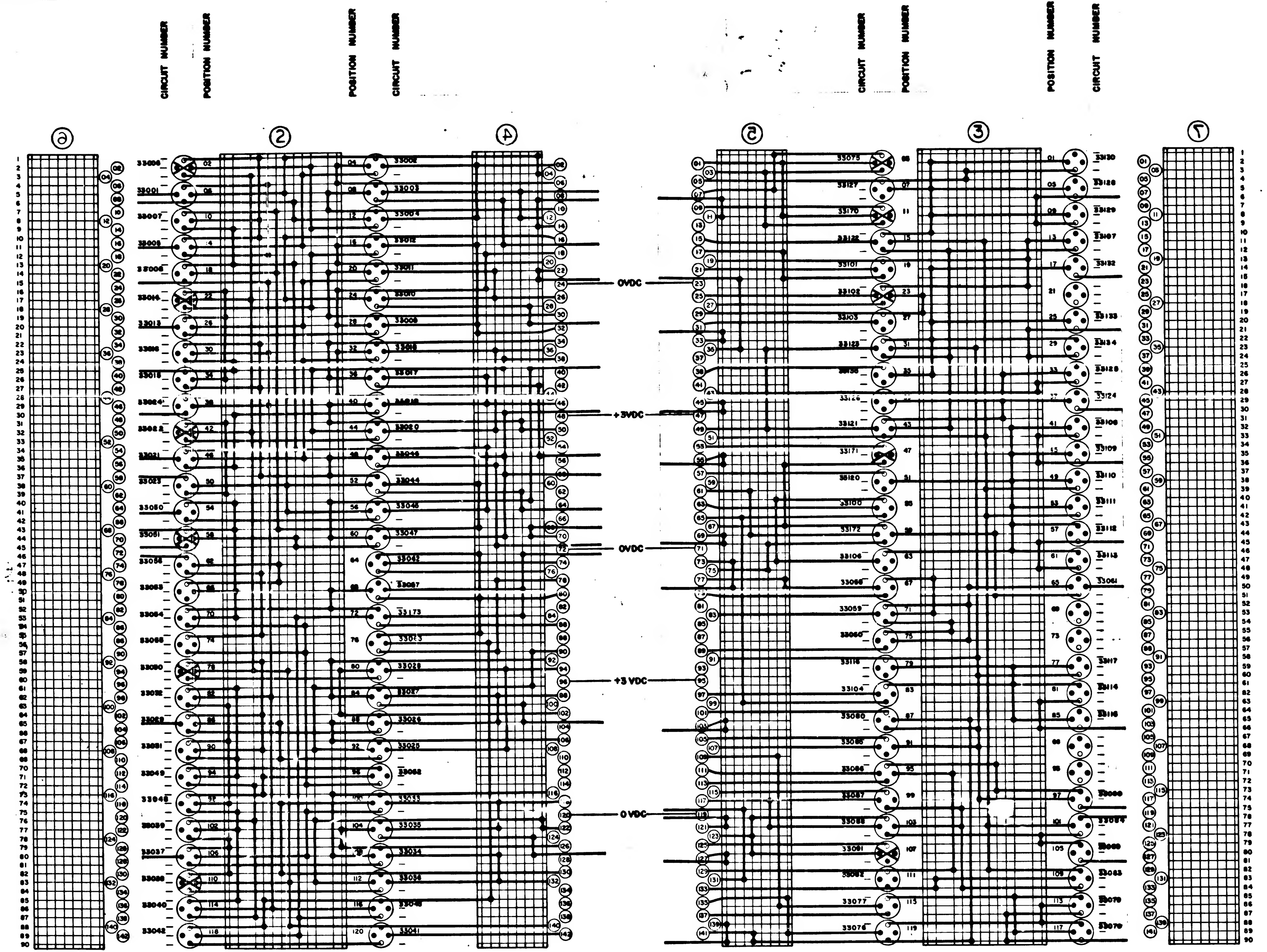
NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 01749

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 02288	7/3/63	



REF DWG
1. LOGIC FLOW DIAGRAM 1006543

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES

DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
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DRAWN D. Glenn DATE 4-18-63
CHECKED J. Rogers CC 4-23-63
APPROVAL 26 JUNE 63
APPROVAL 6/26/63
NASA APPROVAL 6-26-63
MIT APPROVAL 26 June 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A17

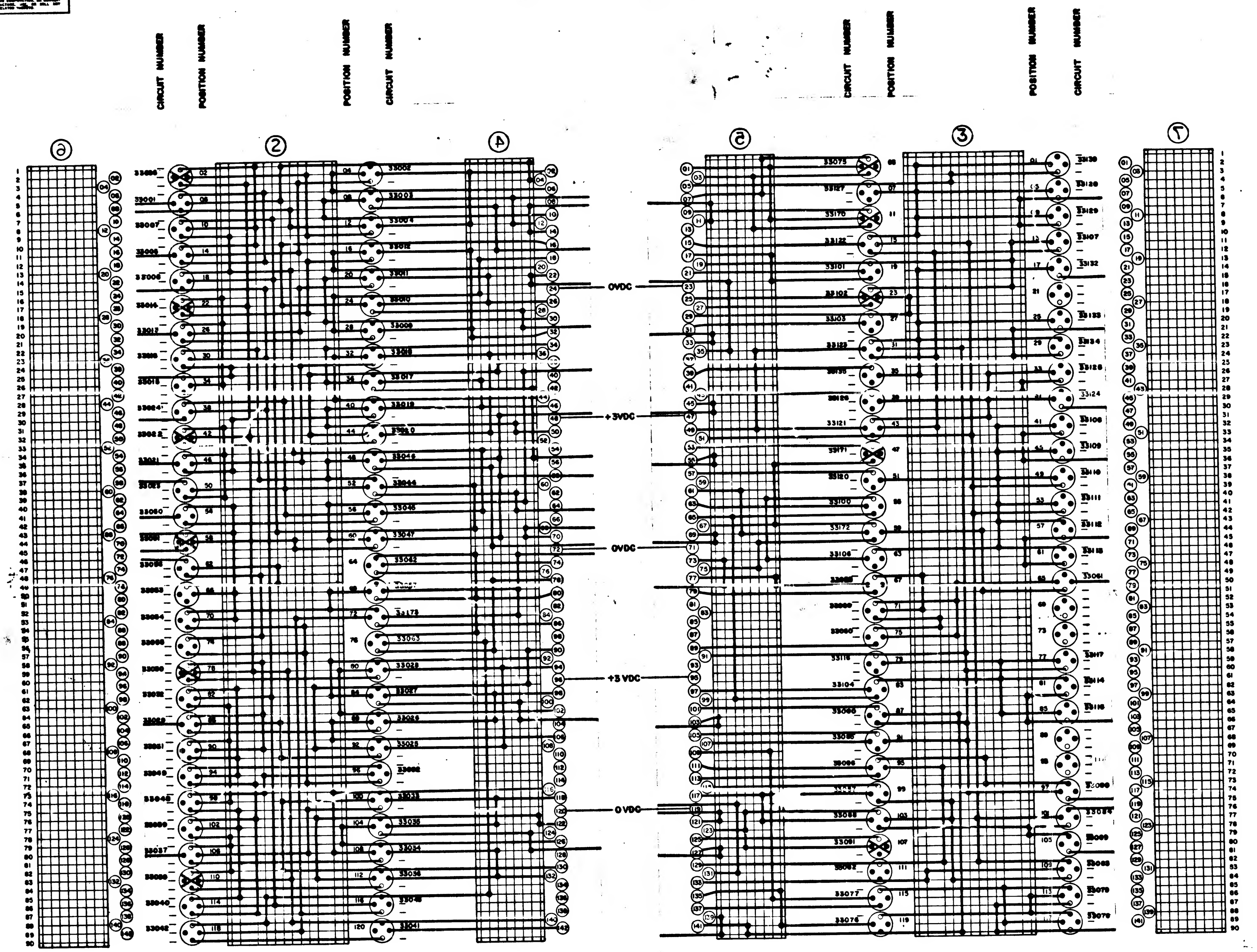
CODE IDENT NO
SIZE E
NASA DRAWING NO 1006123
SCALE
WT
SHEET 1 OF 1

1006123 A

INCHES
PHOTOGRAPHIC SCALE ONLY

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TORR 02288	7/30/63	
B	REVISED PER TORR 03043		

REVISIONS 01749



REF DWG
1. LOGIC FLOW DIAGRAM 1006543

NOTES-

1.- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013

3- DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES

DO NOT SCALE THIS DRAWING

MATERIAL

HEAT TREATMENT

FINAL FINISH

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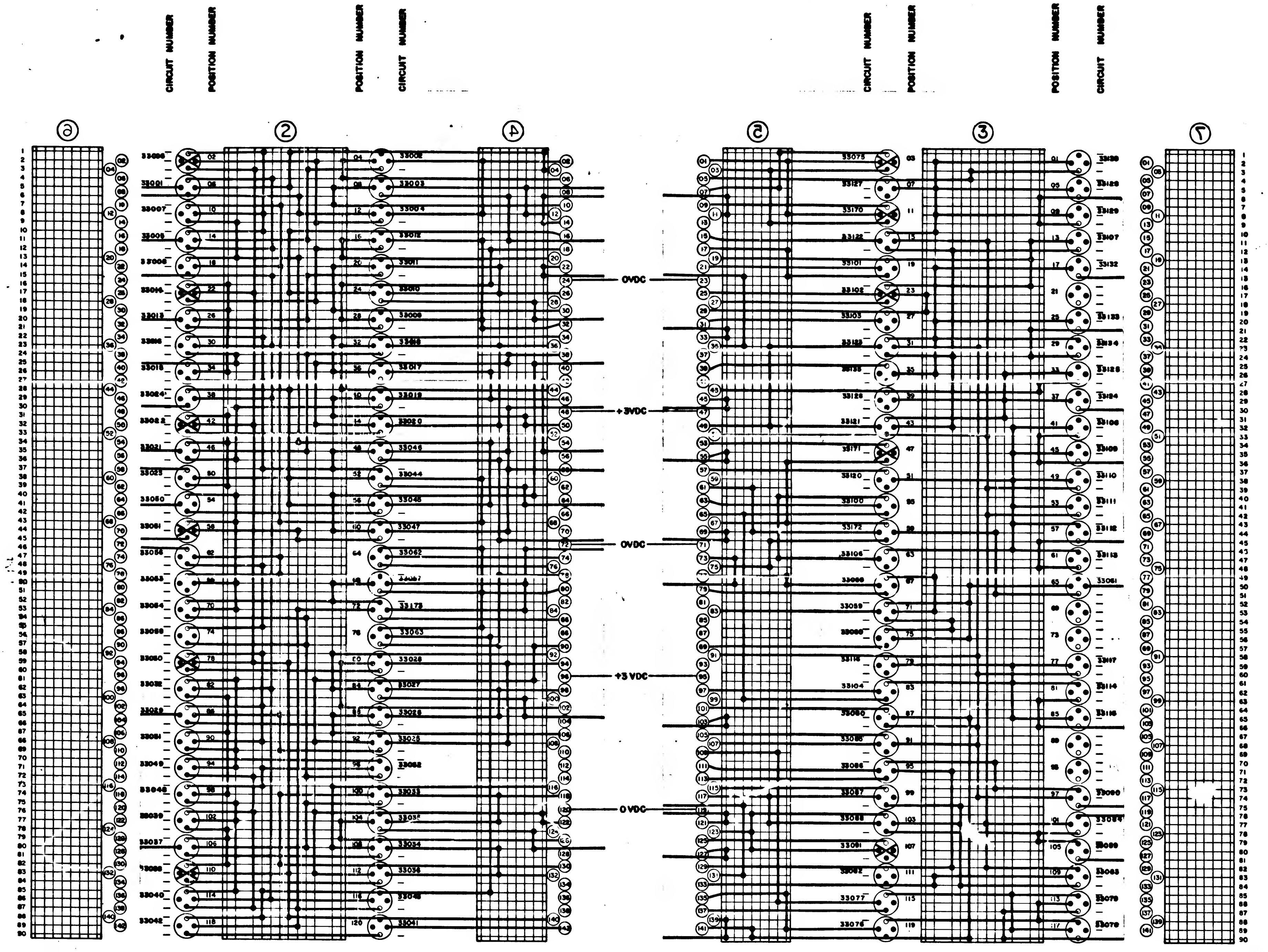
DRAWN DATE 4-18-63
CHECKED CC 4-23-63
APPROVAL 26 JUNE 63
APPROVAL
NASA APPROVAL 6-26-63
MIT APPROVAL 26 June 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A17

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006123
SCALE
WT
SHEET 1 OF 1

1006123 B



REF DWG
1. LOGIC FLOW DIAGRAM 1006543

NOTES-

1.- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ⊙ DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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DRAWN DATE 4-18-63
CHECKED CC 4-23-63
APPROVAL 26 JUNE 63
APPROVAL
NASA APPROVAL 6-26-63
MIT APPROVAL 26 Jun 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A17

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006123
SCALE
WT
SHEET 1 OF 1

1006123

INCHES
PHOTOGRAPHIC SCALE ONLY

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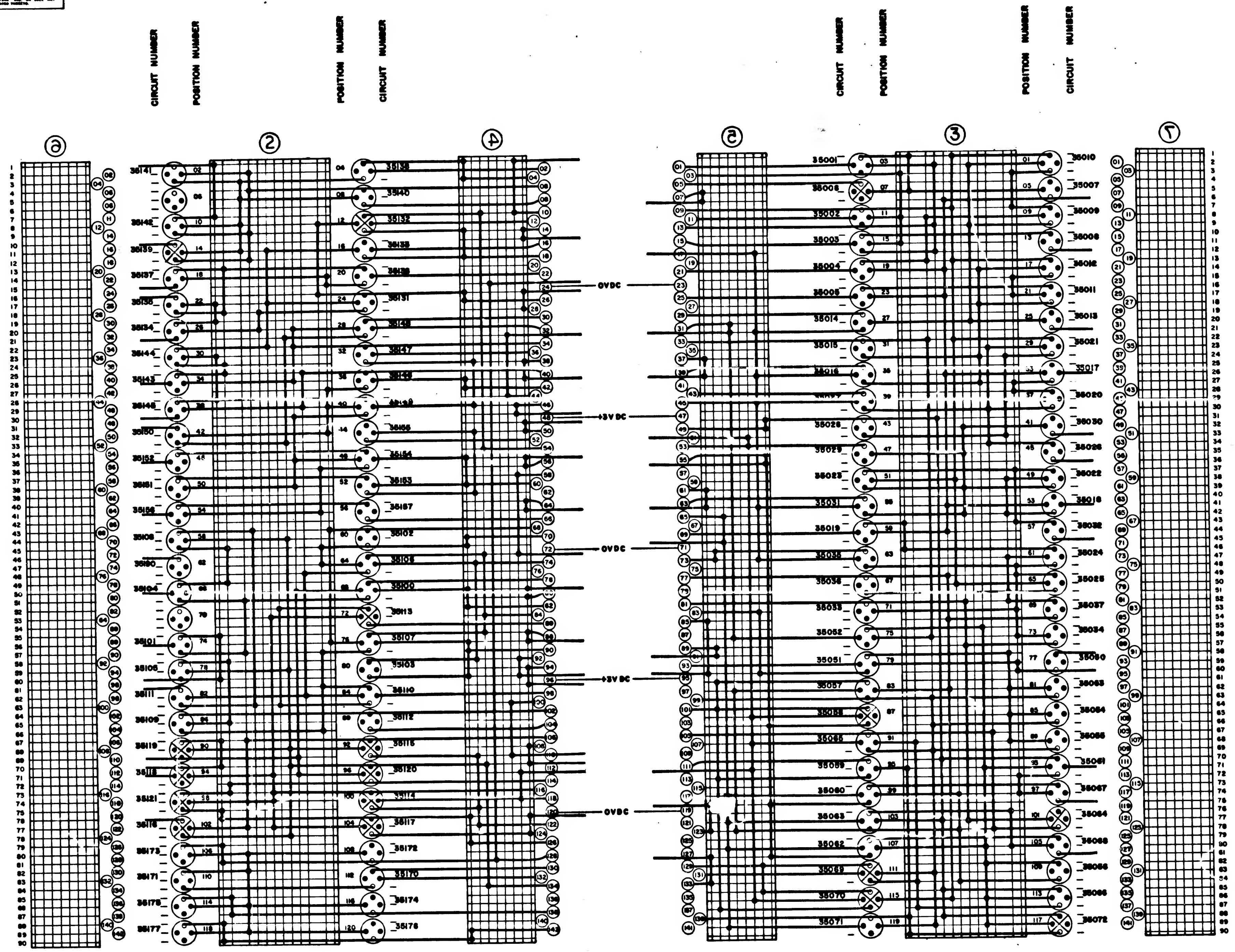
REVISIONS TDRR 02694

SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006544

NOTES—

1— INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013

3- ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
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DWG NO CONTRACT
DRAWN A. Pidge DATE 12-2-63
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APPROVAL W D Turner 15 Aug 63
APPROVAL 8/21/63
NASA APPROVAL 8/21/63
MIT APPROVAL 8/21/63

MANNED SPACECRAFT CENTER
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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-27

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006124
SCALE 2/1 WT SHEET 1 OF 1

1006124

INCHES
PHOTOGRAPHIC SCALE ONLY

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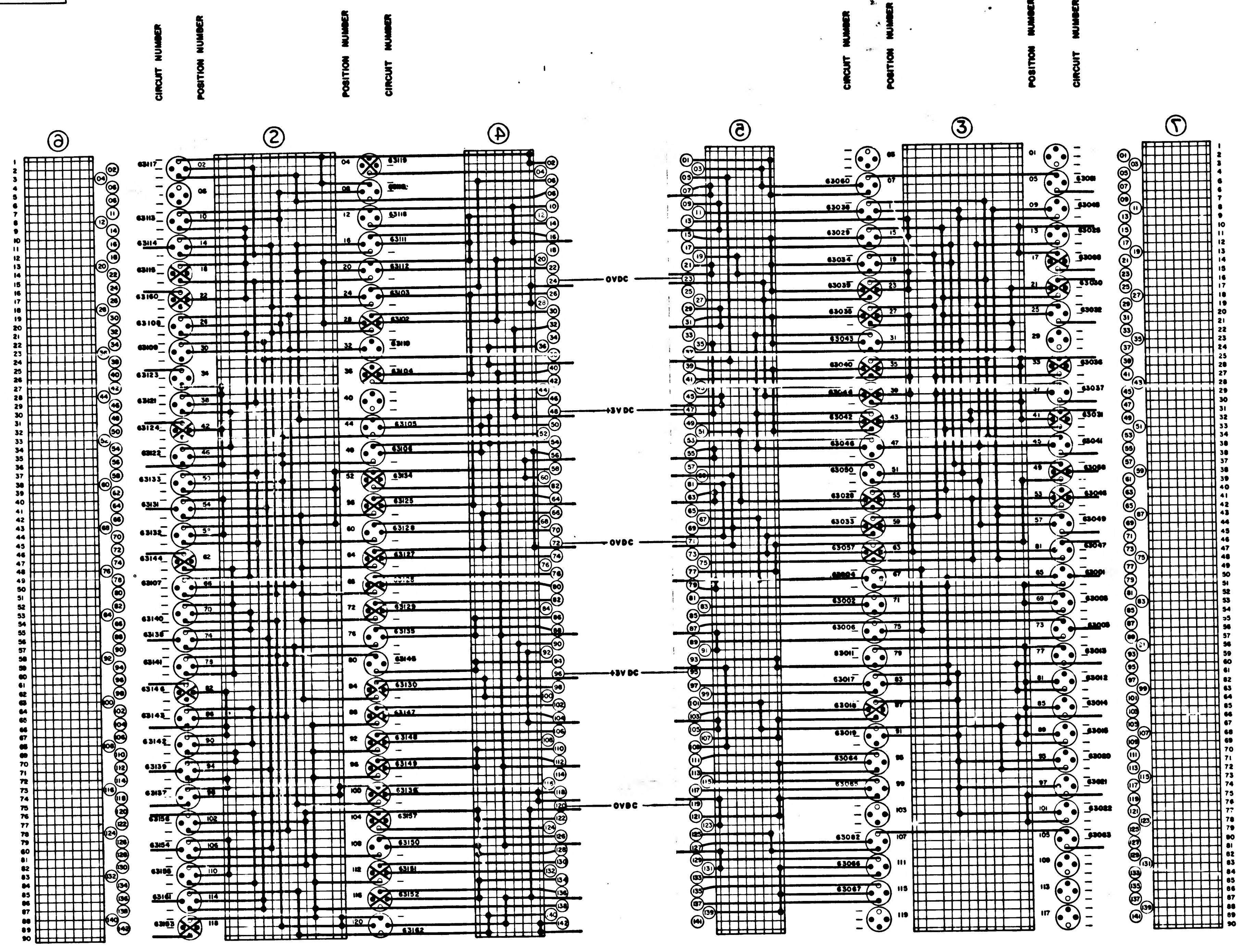
REVISIONS TBRR 02694			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006546

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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DWG NO. CONTRACT
DRAWN P. Bing DATE 8-19-63
CHECKED
APPROVAL W. B. Dennen 20 Aug 63
APPROVAL
NASA APPROVAL 8/21/63
MIT APPROVAL

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-32

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006126
SCALE 2/1
WT
SHEET 1 OF 1

1006126

INCHES
PHOTOGRAPHIC SCALE ONLY

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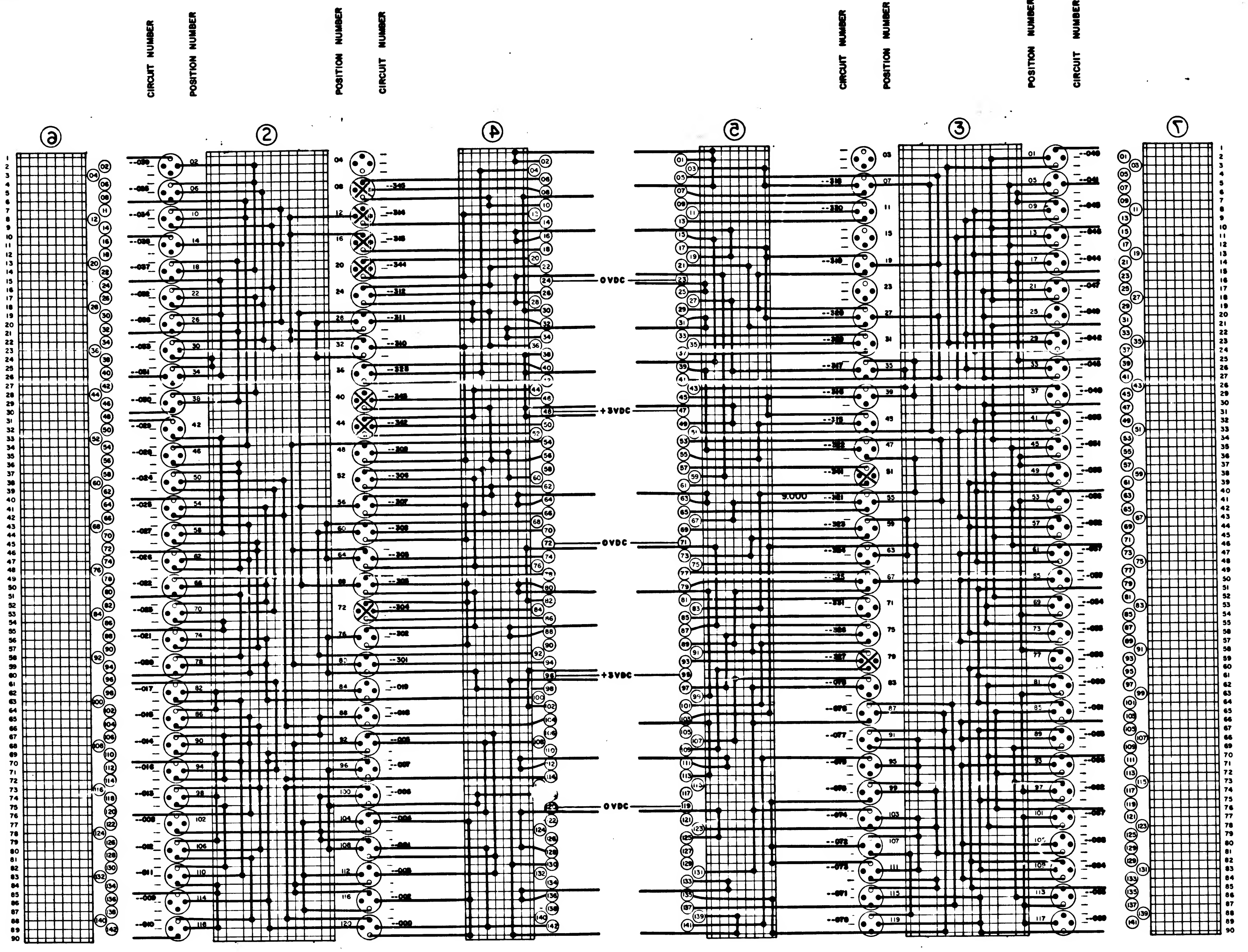
REVISIONS TDRR 01567

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 01813		



REF. DWG.
1. LOGIC FLOW DIAGRAM 1006547

NOTES-
1. INTERPRET DWG IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED)
3. ○ DENOTES "NOR" CIRCUIT
REFER TO DWG. NO. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN Mahoney DATE 2-7-63
CHECKED [illegible]
APPROVAL [illegible] 11 Jun 63
APPROVAL [illegible] 6/12/63
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] Bryant

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A33-34

CODE IDENT NO.
SIZE E
NASA DRAWING NO 1006127
SCALE 2/1
WT
SHEET 1 OF 1

1006127

INCHES
PHOTOGRAPHIC SCALE ONLY

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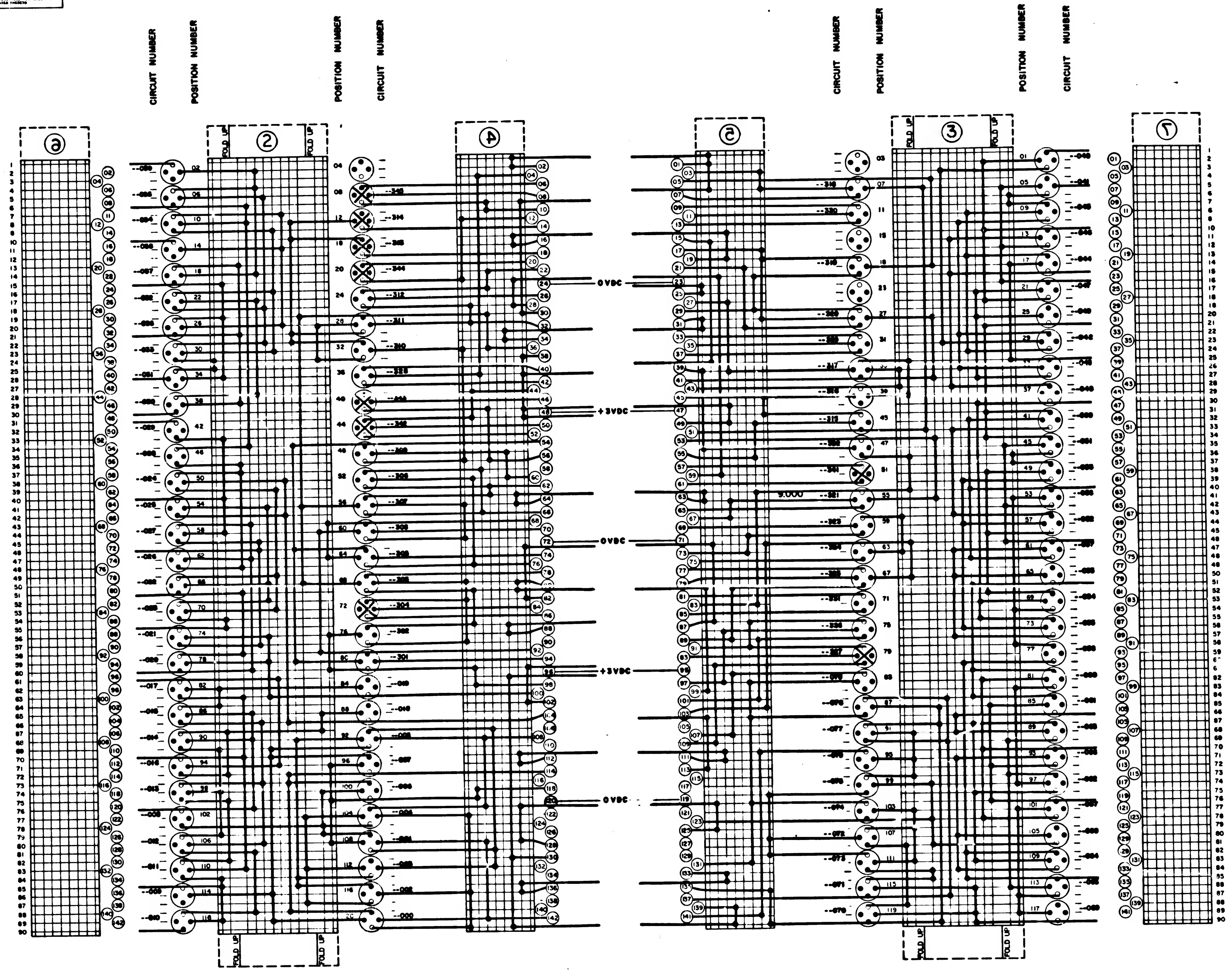
REVISIONS TDRR 0:567			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
I. LOGIC FLOW DIAGRAM 1006547

NOTES-

1. INTERPRET DWG IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED) } REFER TO DWG. NO. 1006013
3. ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
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DWG NO CONTRACT
DRAWN DATE 2-7-63
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NASA APPROVAL
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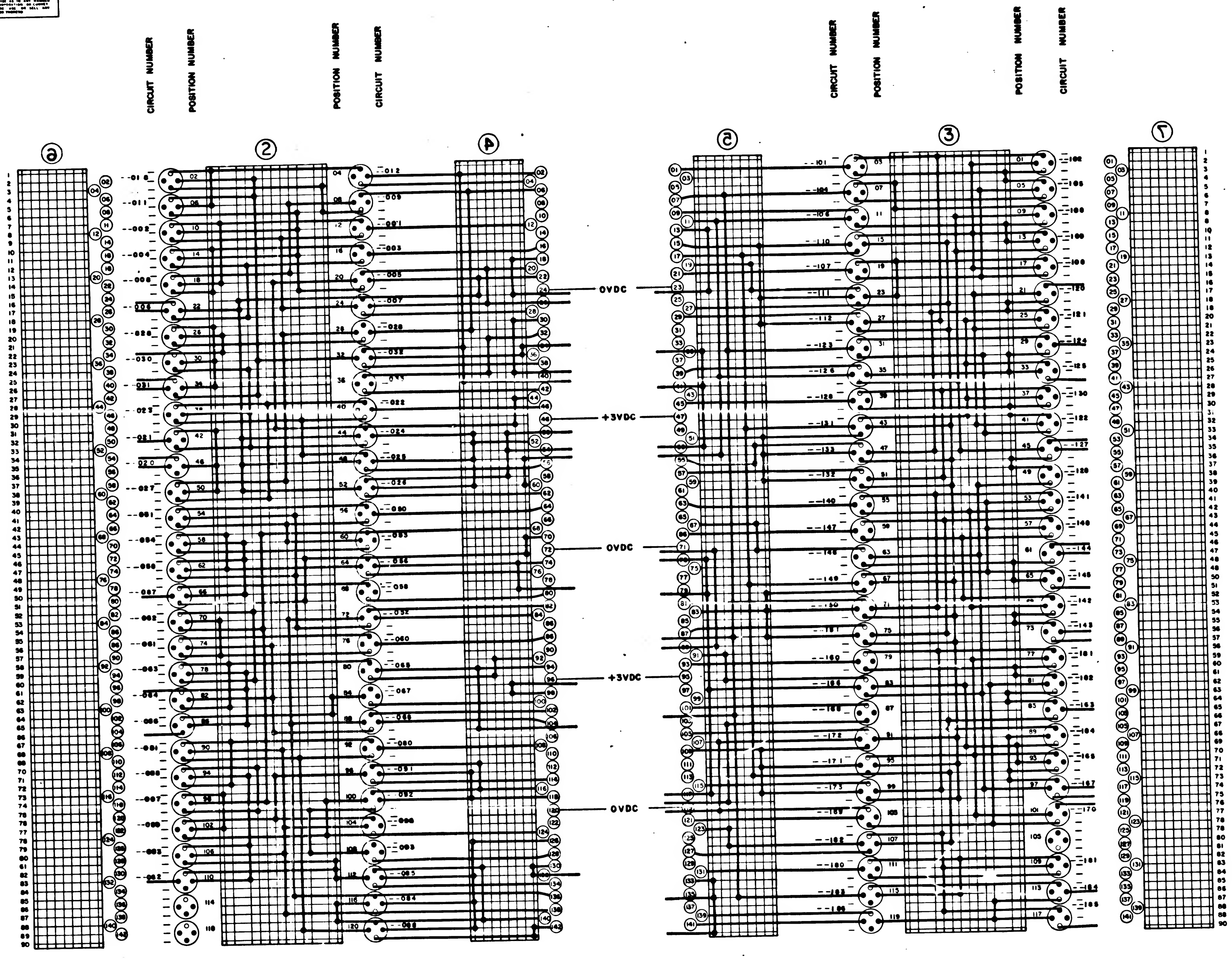
SIGNAL WIRING DIAGRAM
LOGIC MODULE NO.

CODE IDENT NO | SIZE E | NASA DRAWING NO 1006127
SCALE 2/1 | WT | SHEET 1 OF 1

1006127

INCHES
PHOTOGRAPHIC SCALE ONLY

REVISIONS +DCC 01566			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
1. LOGIC FLOW DIAGRAM 1006548

NOTES-
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED) } REFER TO DWG. NO. 1006013
3. ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO.

CODE IDENT NO	SIZE	NASA DRAWING NO
	E	1006128
SCALE 2/1	WT	SHEET 1 OF 1

PHOTOGRAPHIC SCALE ONLY
INCHES

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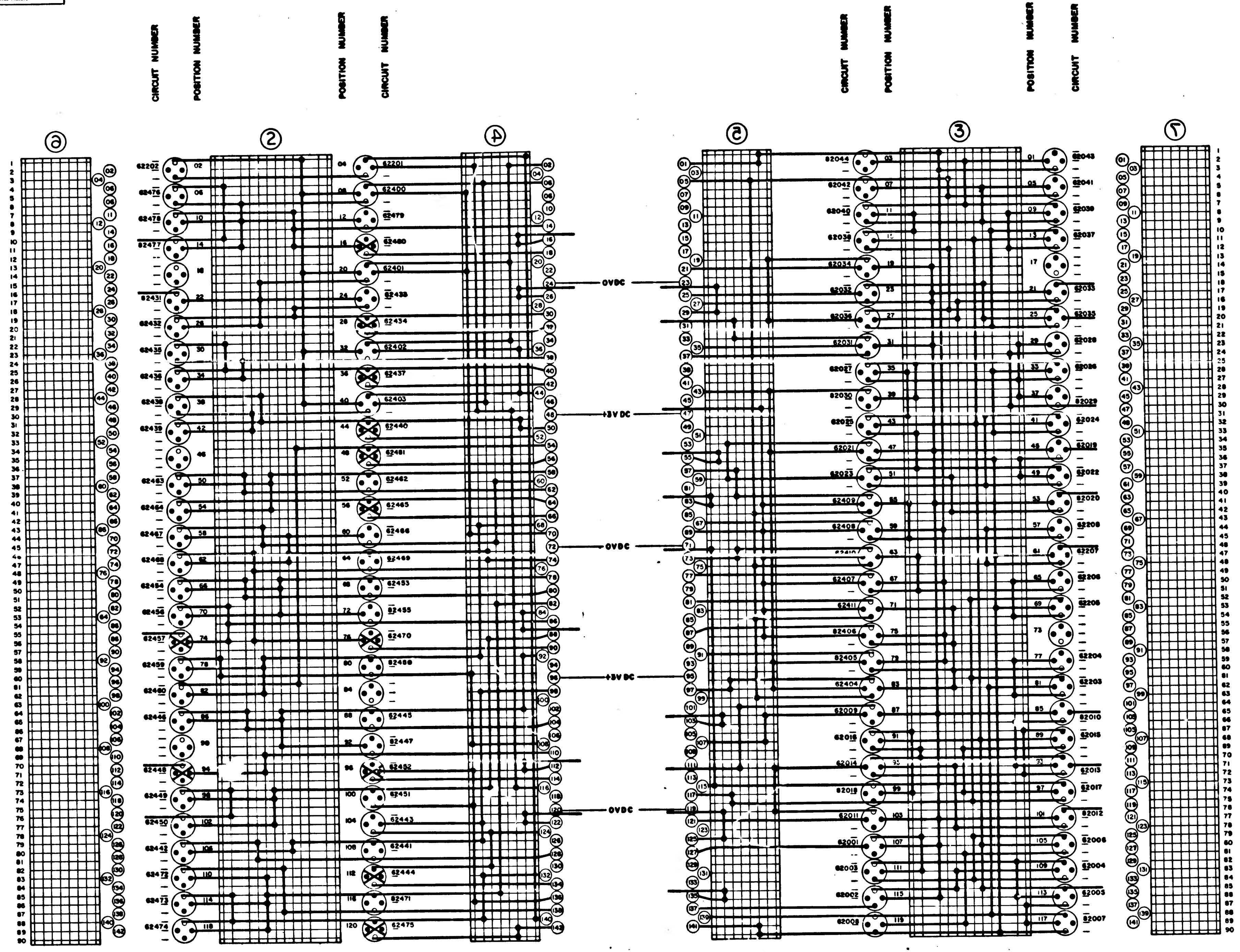
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006549

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013

3- ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
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DWG NO. CONTRACT
DRAWN Mahoney DATE 8-14-63
CHECKED
APPROVAL W.D. Turner 8/15/63
APPROVAL 8/15/63
NASA APPROVAL 8/21/63
MIT APPROVAL

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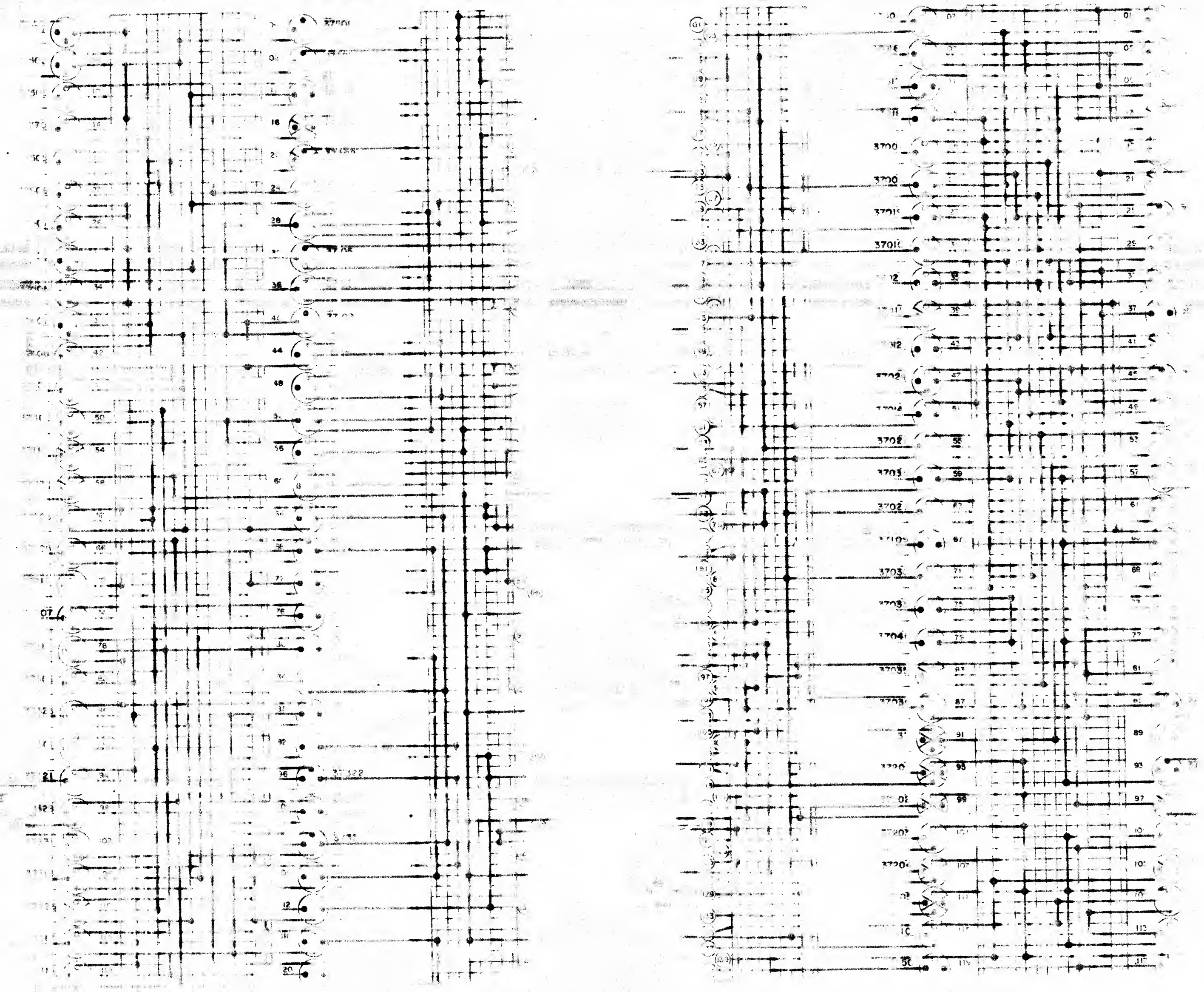
SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-26

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006129
SCALE 2/1 | WT | SHEET 1 OF 1

INCHES
PHOTOGRAPHIC SCALE ONLY



1. [illegible]

2. [illegible]

3. [illegible]

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO A-17
106

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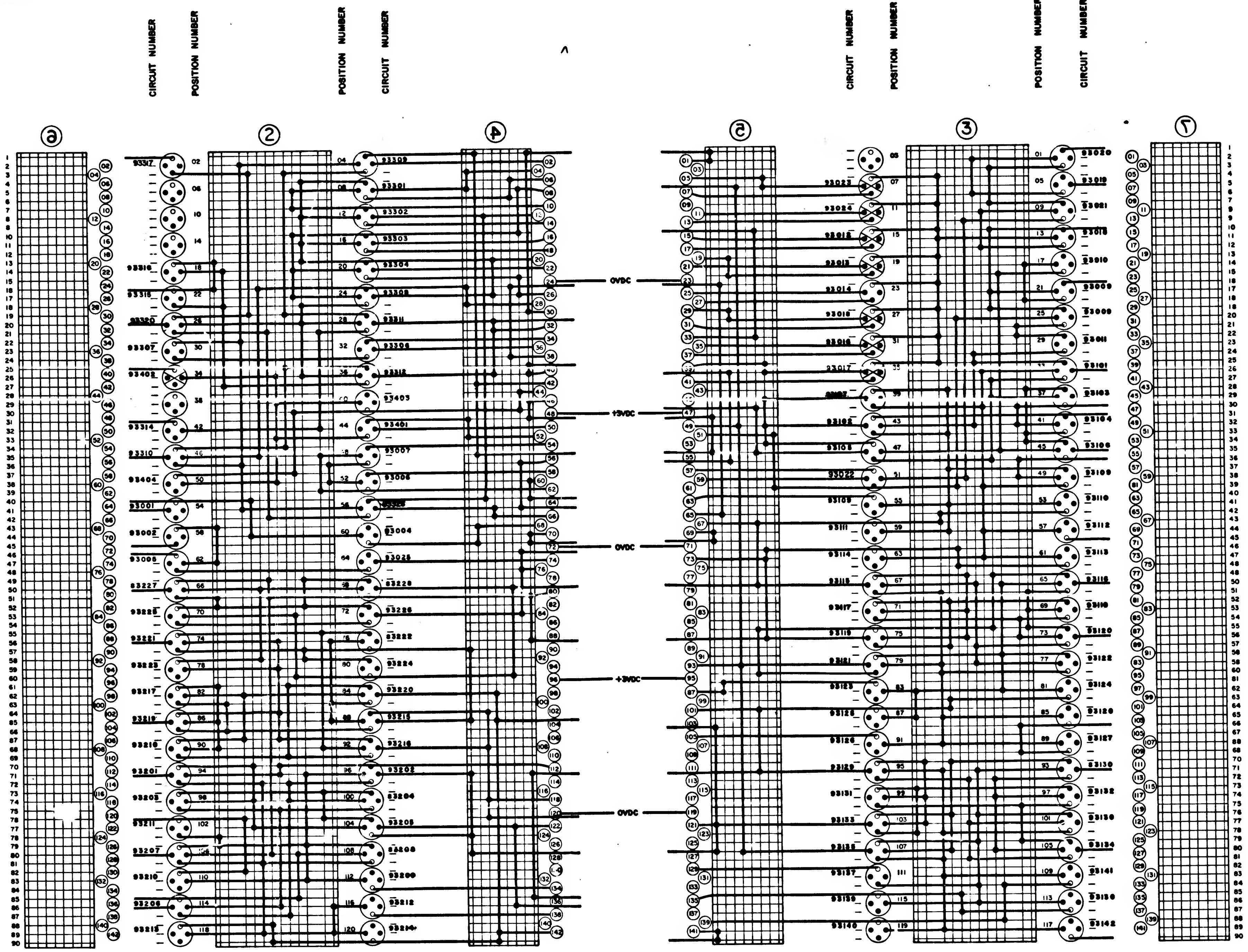
			REVISIONS	TDRR 1608
Ⓒ	SYM	DESCRIPTION	DATE	APPROVAL
	A	REVISED PER TDRR 01815		



REF. DWG.
L LOGIC FLOW DIAGRAM 1006551

NOTES–
1 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2 ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED)
3 ⊙ DENOTES "NOR" CIRCUIT
REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL NONE
HEAT TREATMENT NONE
FINAL FINISH NONE

M I T
INSTRUMENTATION LAB
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DWG. NO. CONTRACT
DRAWN R.C. Taylor DATE 9-22-62
CHECKED W. Gifford CC
APPROVAL W. Turner 6/18
APPROVAL Eldon C. Hall 6/18/63
NASA APPROVAL
MIT APPROVAL

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SIGNAL WIRING
DIAGRAM
LOGIC MODULE NO. A38

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006131
SCALE | WT | SHEET 1 OF 1

1006131

INCHES
PHOTOGRAPHIC SCALE ONLY

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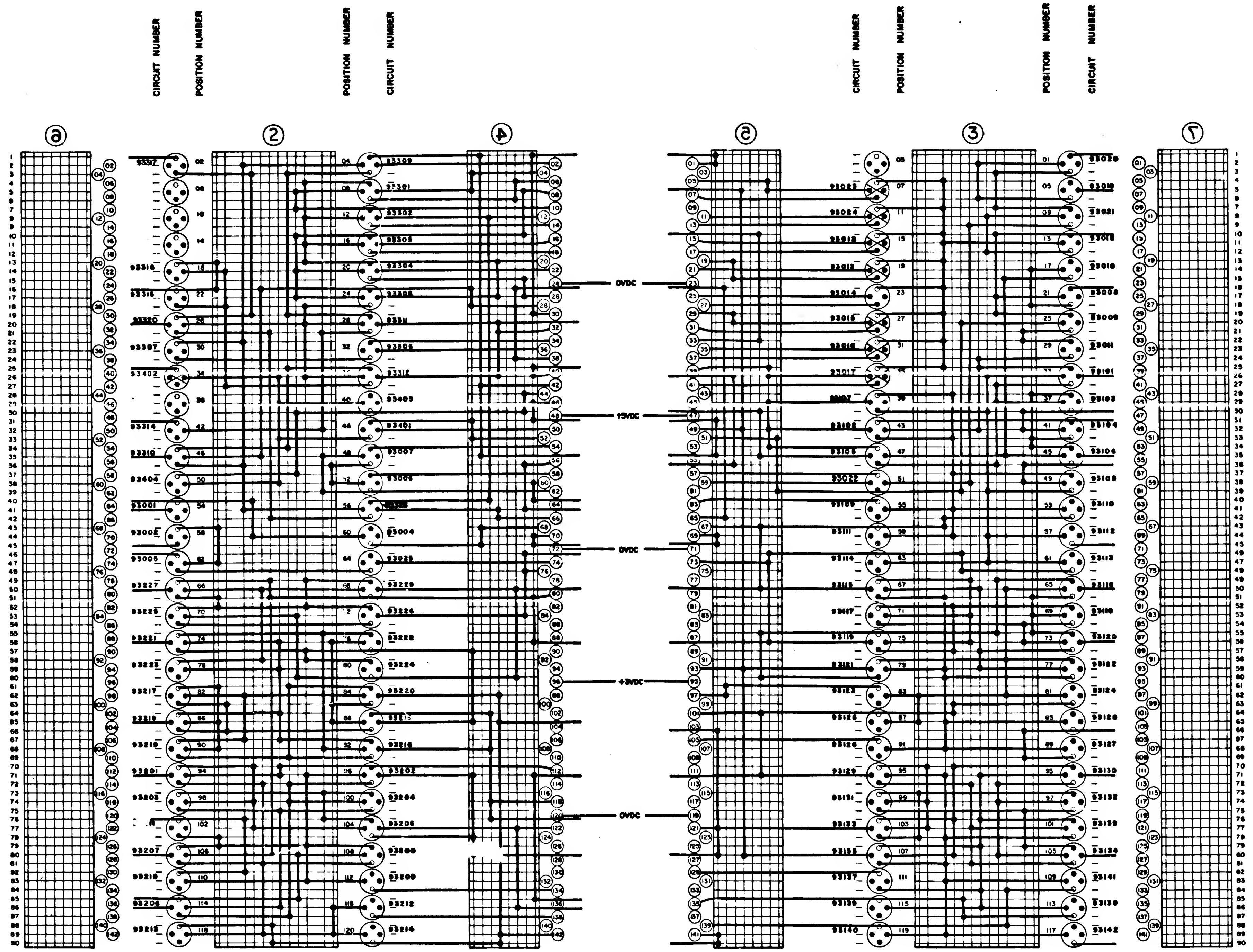
REVISIONS			22R 1608
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
1. LOGIC FLOW DIAGRAM 1006551

NOTES-
1 INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2 ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED) } REF. DWG. 1006013
3 ⊙ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
± ± ±
DO NOT SCALE THIS DRAWING
MATERIAL NONE
HEAT TREATMENT NONE
FINAL FINISH NONE

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DWG NO CONTRACT
DRAWN R.C. Taylor DATE 9-22-63
CHECKED W. Gifford C.C.
APPROVAL [illegible] 6/12/63
APPROVAL Eldon C. Hall 6/18/63
NASA APPROVAL [illegible] 6/4/63
MIT APPROVAL

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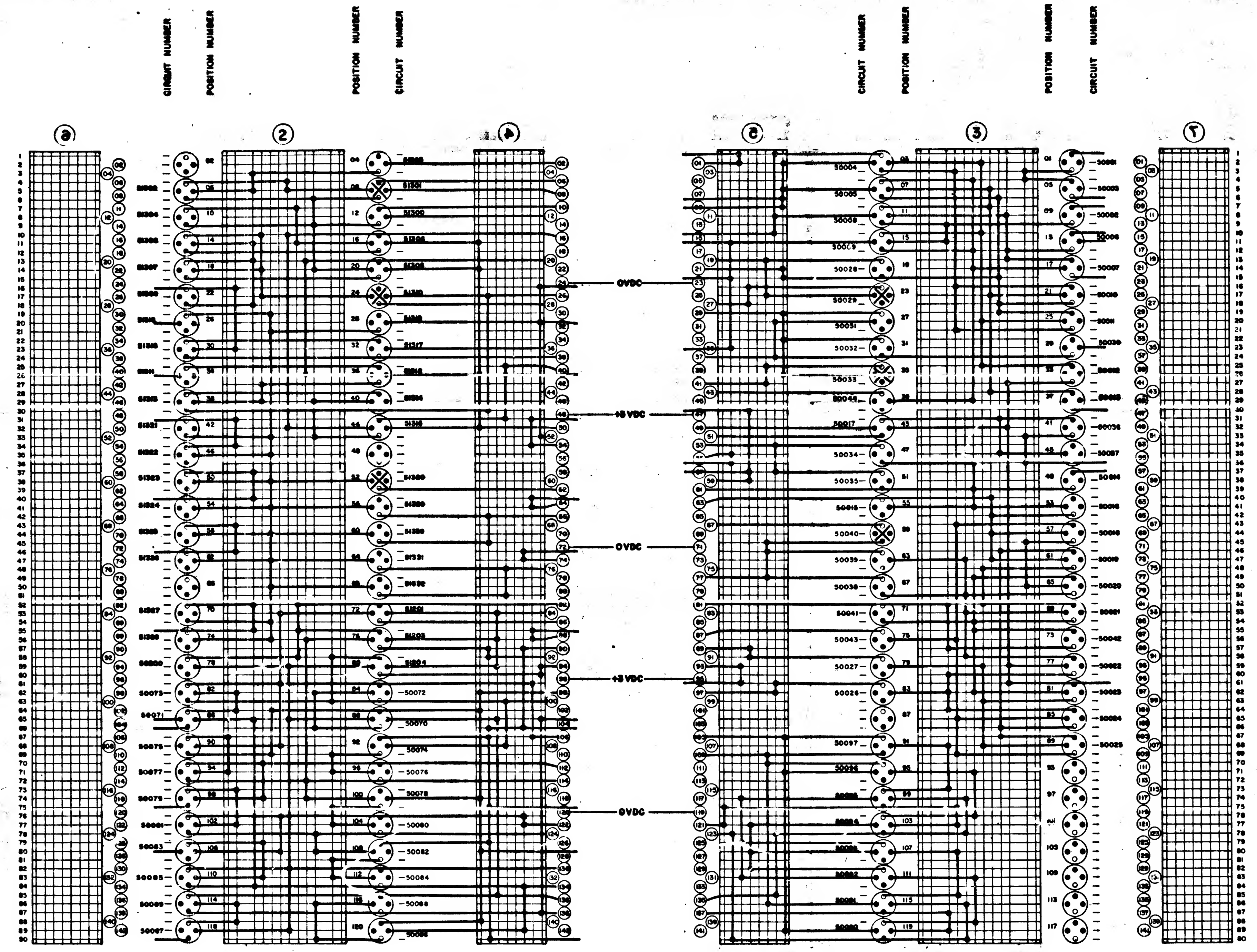
SIGNAL WIRING
DIAGRAM
LOGIC MODULE NO.

CODE IDENT NO
SIZE E
NASA DRAWING NO 1006131
SCALE
WT
SHEET 1 OF 1

1006131

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY



NOTES-

1- INTERPRET DWG IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006018

REF DWG

1. LOGIC FLOW DIAGRAM 1006552

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
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APPROVAL 7/30/63
APPROVAL

NASA APPROVAL W J 7-31-63

MIT APPROVAL

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-28

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006132
SCALE 2/1
WT
SHEET 1 OF 1

1006096

INCHES
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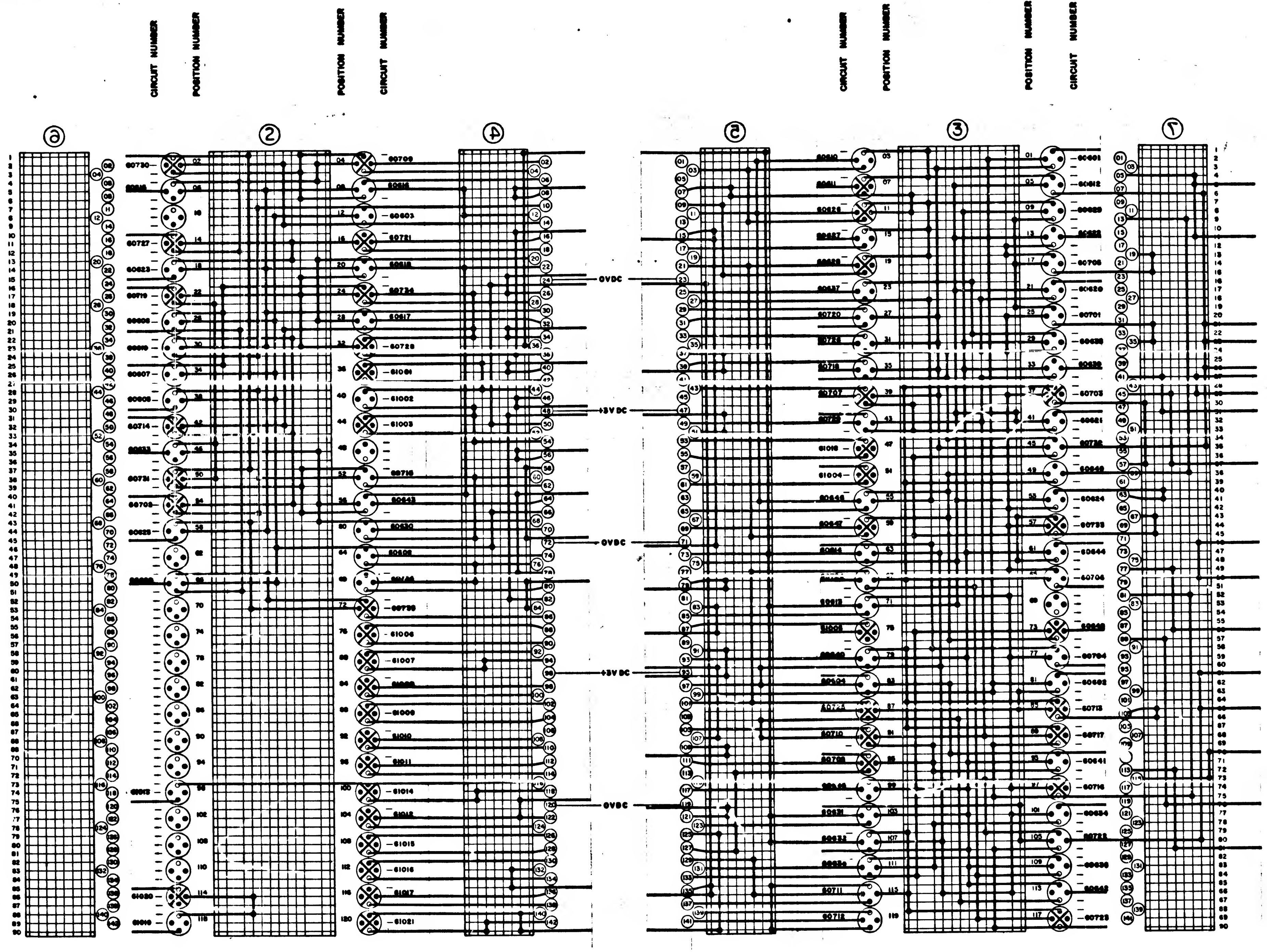
SYM	REVISIONS DESCRIPTION	DATE	APPROVAL



REF DWG
1.LOGIC FLOW DIAGRAM 1006553

NOTES-
1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013
3- ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
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CAMBRIDGE, MASS
DRAWN Ed Powers DATE 2-3-63
CHECKED 7/29/63
APPROVAL W. Bowman 7/30/63
APPROVAL 7/31/63
NASA APPROVAL W. J. 7-31-63
MIT APPROVAL

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A22

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006133
SCALE 2/1 | WT | SHEET 1 OF 1

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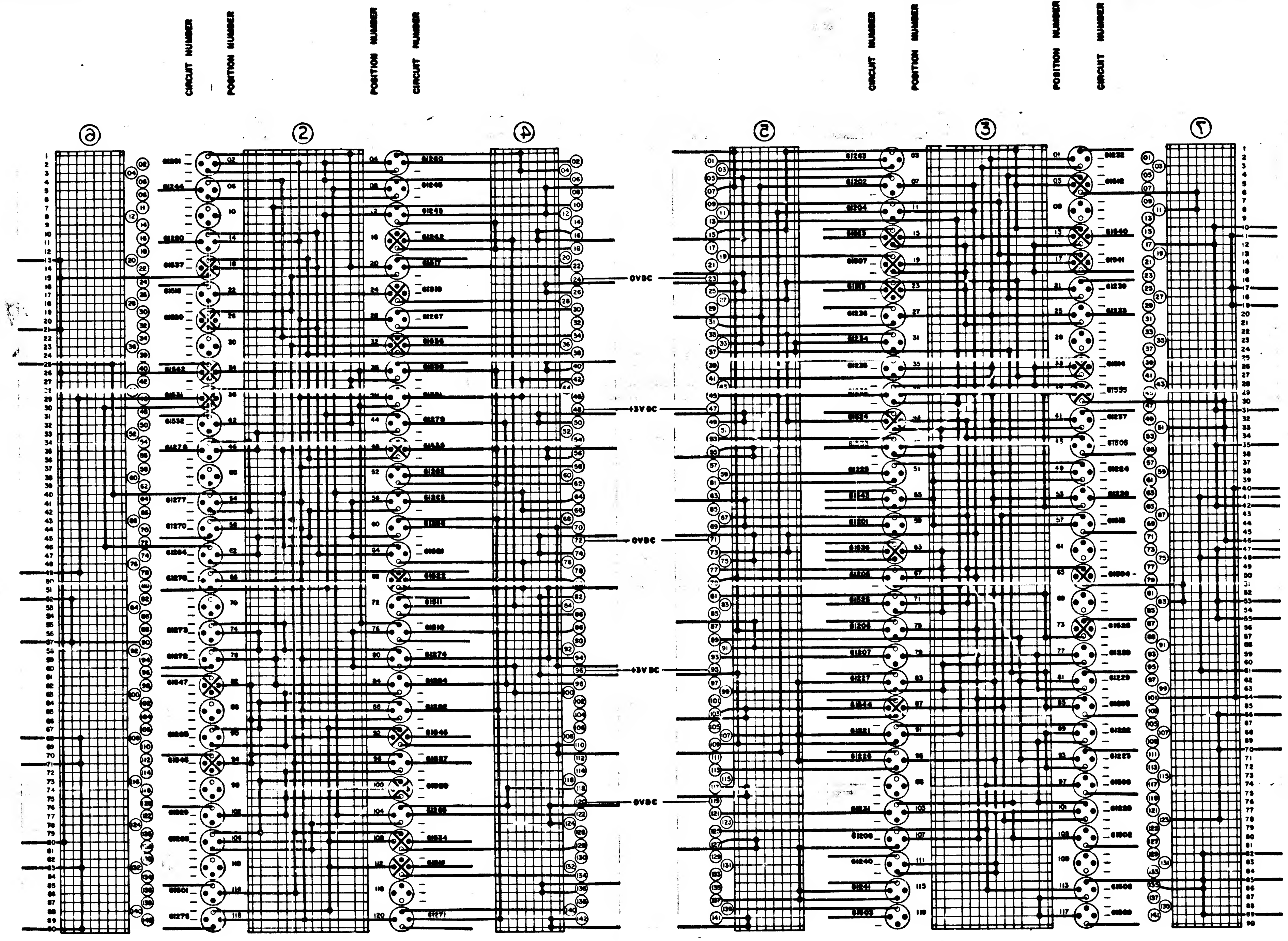
REVISIONS TDRR 02782			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006555

NOTES -

1— INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006015

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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DWG. NO. CONTRACT
DRAWN DATE
CHECKED
APPROVAL 7/28/65
APPROVAL 7/30/65
NASA APPROVAL 5-31-67
MIT APPROVAL

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A24

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006135
SCALE 2/1
WT
SHEET 1 OF 1

INCHES
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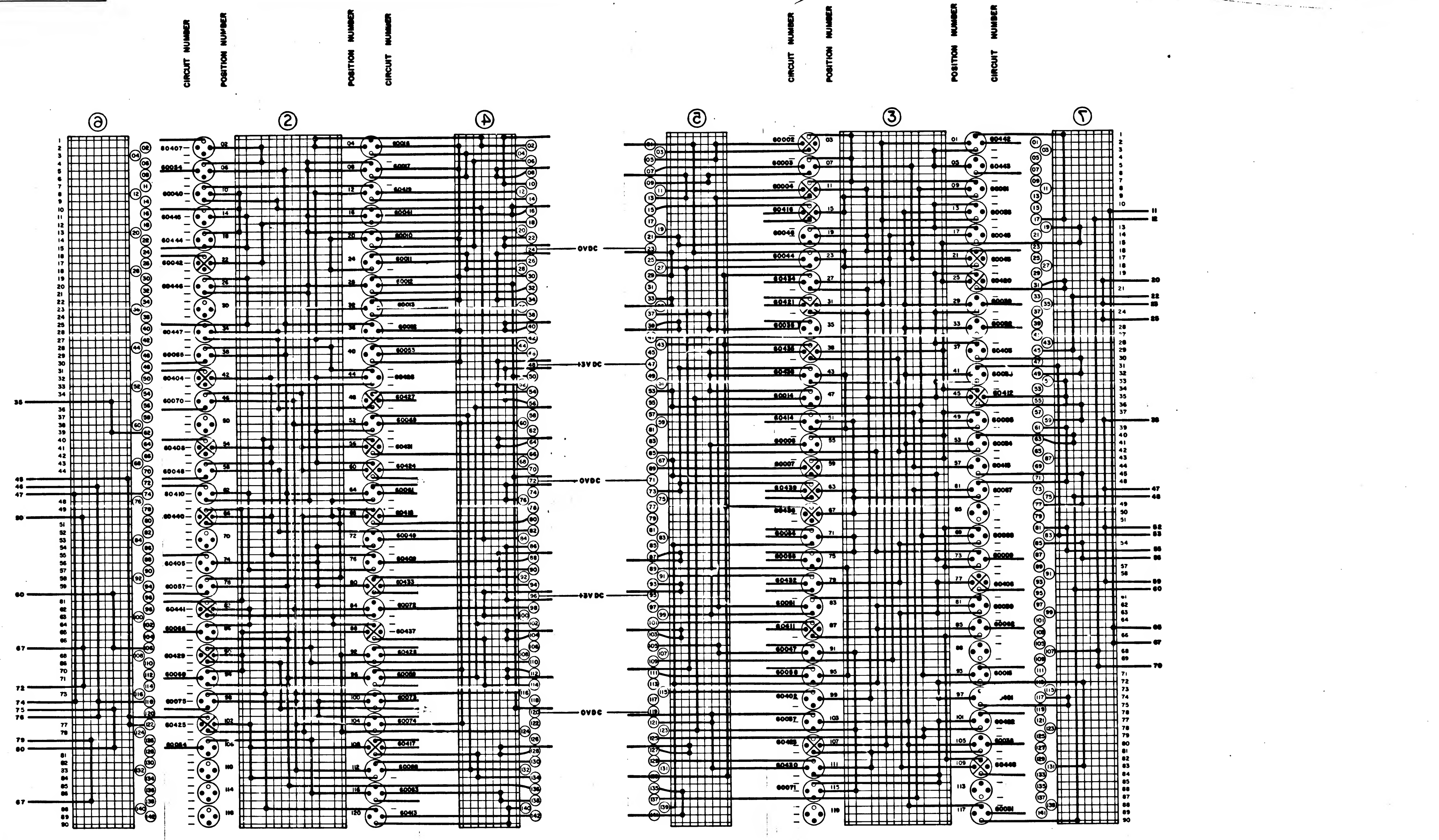
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 03-28	7-12-63	RPL

REVISIONS TDRR 03-28



REF. DWG.
LLOGIC FLOW DIAGRAM 1006556

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 5
HEAT TREATMENT
FINAL FINISH

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DRAWN A. Gargalis DATE 7/4/63
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APPROVAL W.B. Jansen 7/4/63
APPROVAL
NASA APPROVAL W.J. Rhine 7-17-63
MIT APPROVAL J. Hetzel 7/13/63

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A21

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006136
SCALE 2/1
WT
SHEET 1 OF 1

1006136 A

MASTER

INCHES
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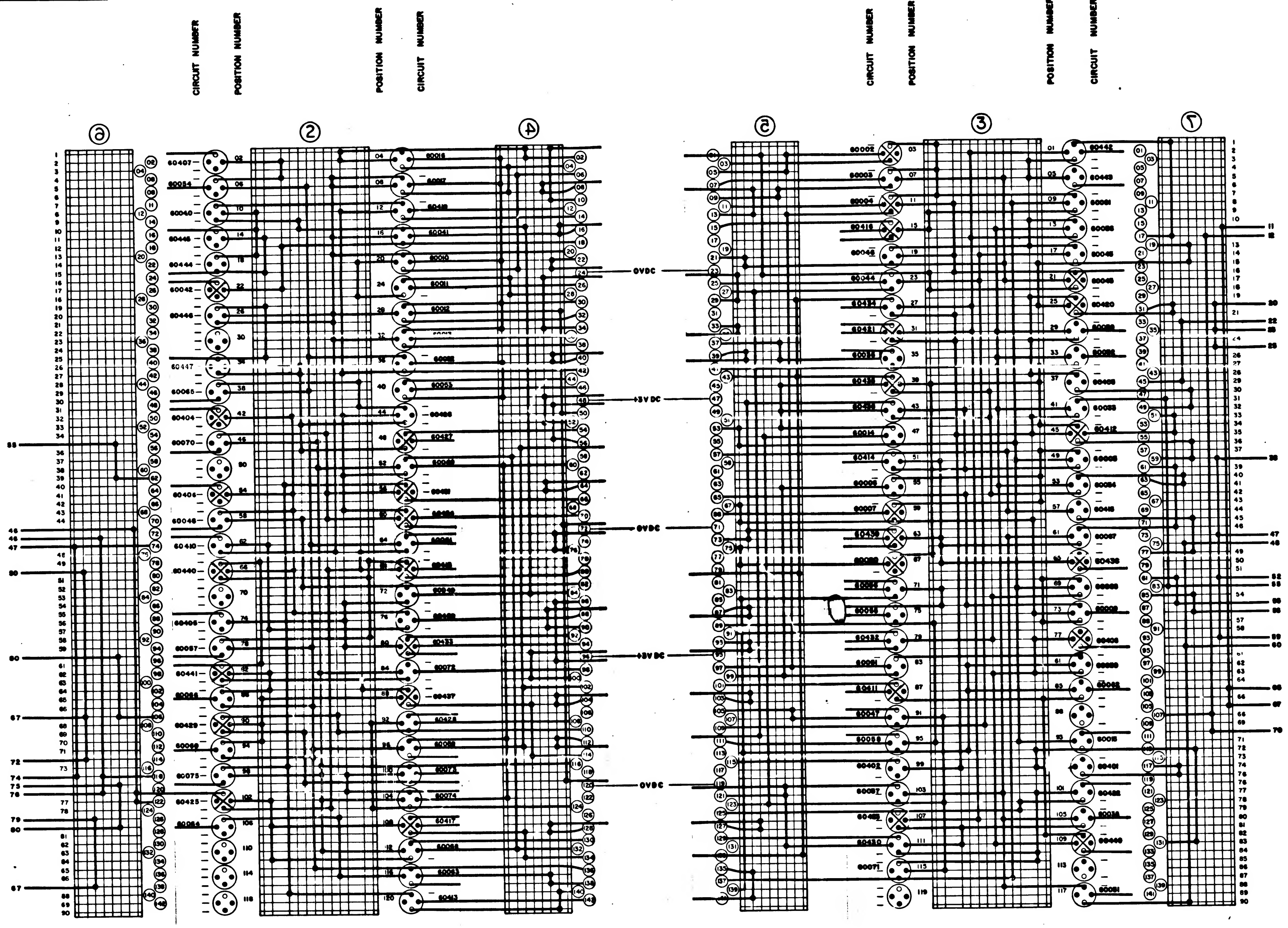
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR [illegible]	7-17-63	[illegible]
B	REVISED PER TDRR 06315	9/11/64	[illegible]



REF. DWG.
LLOGIC FLOW DIAGRAM 1006556

NOTES-
1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013
3- ○ DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS . ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL
SEE NOTE 5

HEAT TREATMENT

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CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL 7-17-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A21

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006136
SCALE 2/1
WT
SHEET 1 OF 1

1006136 B

INCHES
PHOTOGRAPHIC SCALE ONLY

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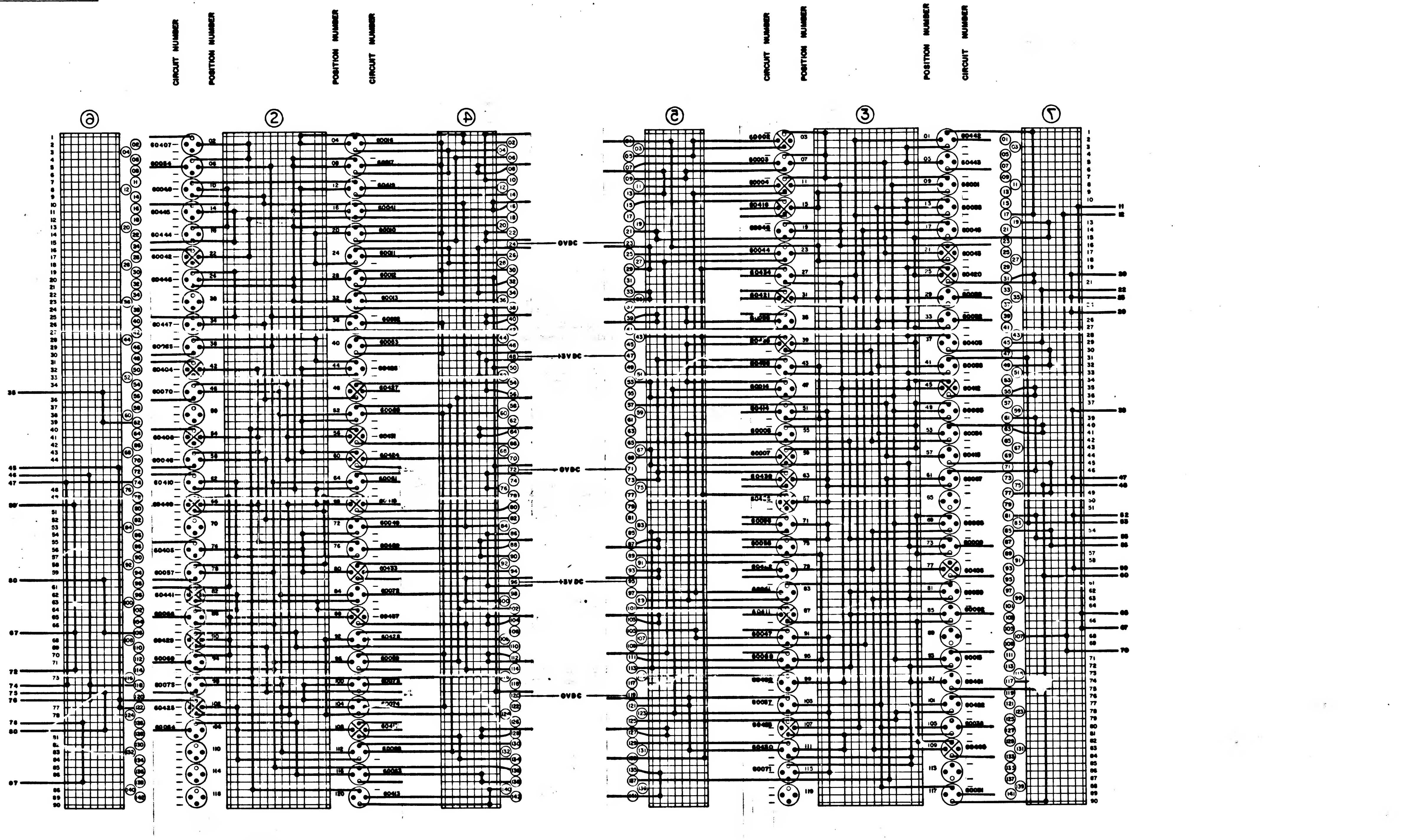
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006556

NOTES-

1- INTERPRET DRAWINGS IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3VDC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ANGLES ±
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SEE NOTE 5

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A21

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	E	1006136

SCALE 2/1 WT SHEET 1 OF 1

1006136

INCHES
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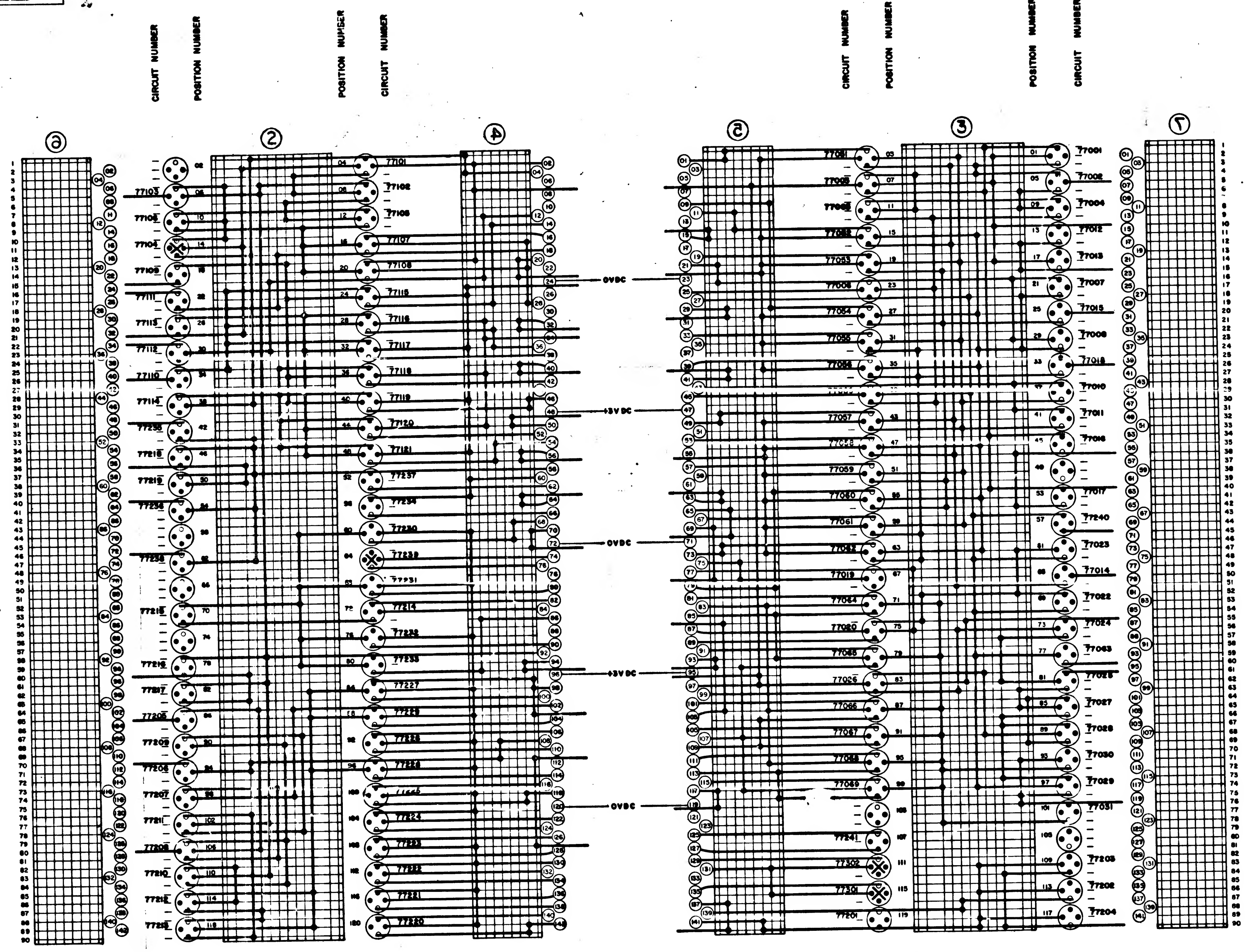
REVISIONS TDRR 02694			
SYM	DESCRIPTION	DATE	APPROVAL



REF. DWG.
LLOGIC FLOW DIAGRAM 1006557

NOTES—
1— INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2- DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED) } REF. DWG. 1006013
3- DENOTES "NOR" CIRCUIT

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
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FRACTIONS ± DECIMALS ± ANGLES ±
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MATERIAL
HEAT TREATMENT
FINAL FINISH

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DWG NO CONTRACT
DRAWN E. Gross DATE [illegible]
CHECKED [illegible]
APPROVAL [illegible] 8/15/63
APPROVAL [illegible]
NASA APPROVAL [illegible] 8/21/63
MIT APPROVAL [illegible]

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A36

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006137
SCALE 2/1 | WT | SHEET 1 OF 1

MASTER

1006137

INCHES
0 1 2
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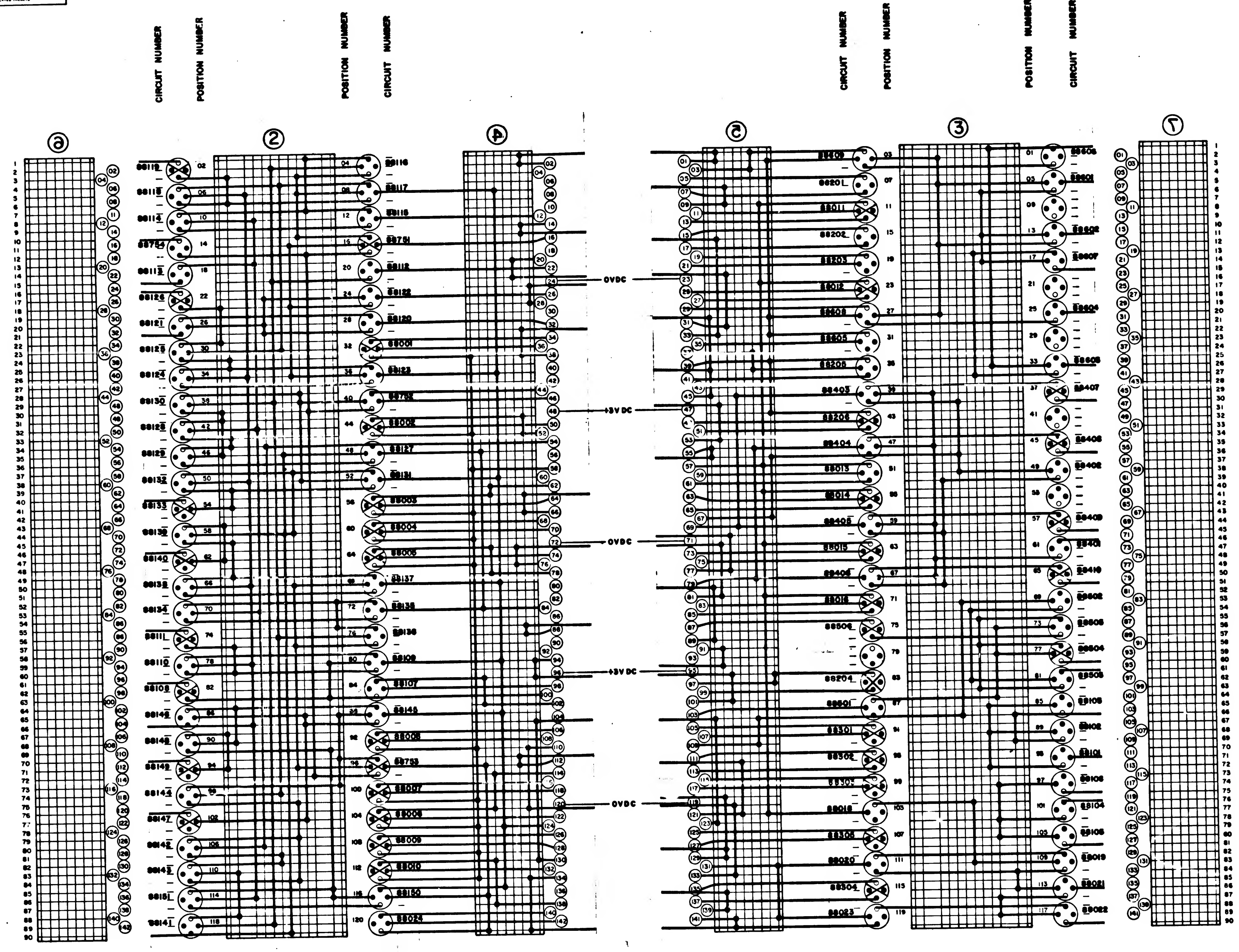
REVISIONS 03, 39			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 06147	4/4/64	



REF. DWG.
LLOGIC FLOW DIAGRAM 1006559

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- ⊗ DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- ○ DENOTES "NOR" CIRCUIT

} REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
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MATERIAL SEE NOTE 5
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CAMBRIDGE, MASS.
DRAWN W. F. Troy DATE 8/22/63
CHECKED
APPROVAL W. B. [illegible] 9/10/63
APPROVAL
NASA APPROVAL [illegible] 9/12/63
MIT APPROVAL [illegible] 12 Sep 63

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-29

CODE IDENT NO. —
SIZE E
NASA DRAWING NO 1006139
SCALE 2/1
WT
SHEET 1 OF 1

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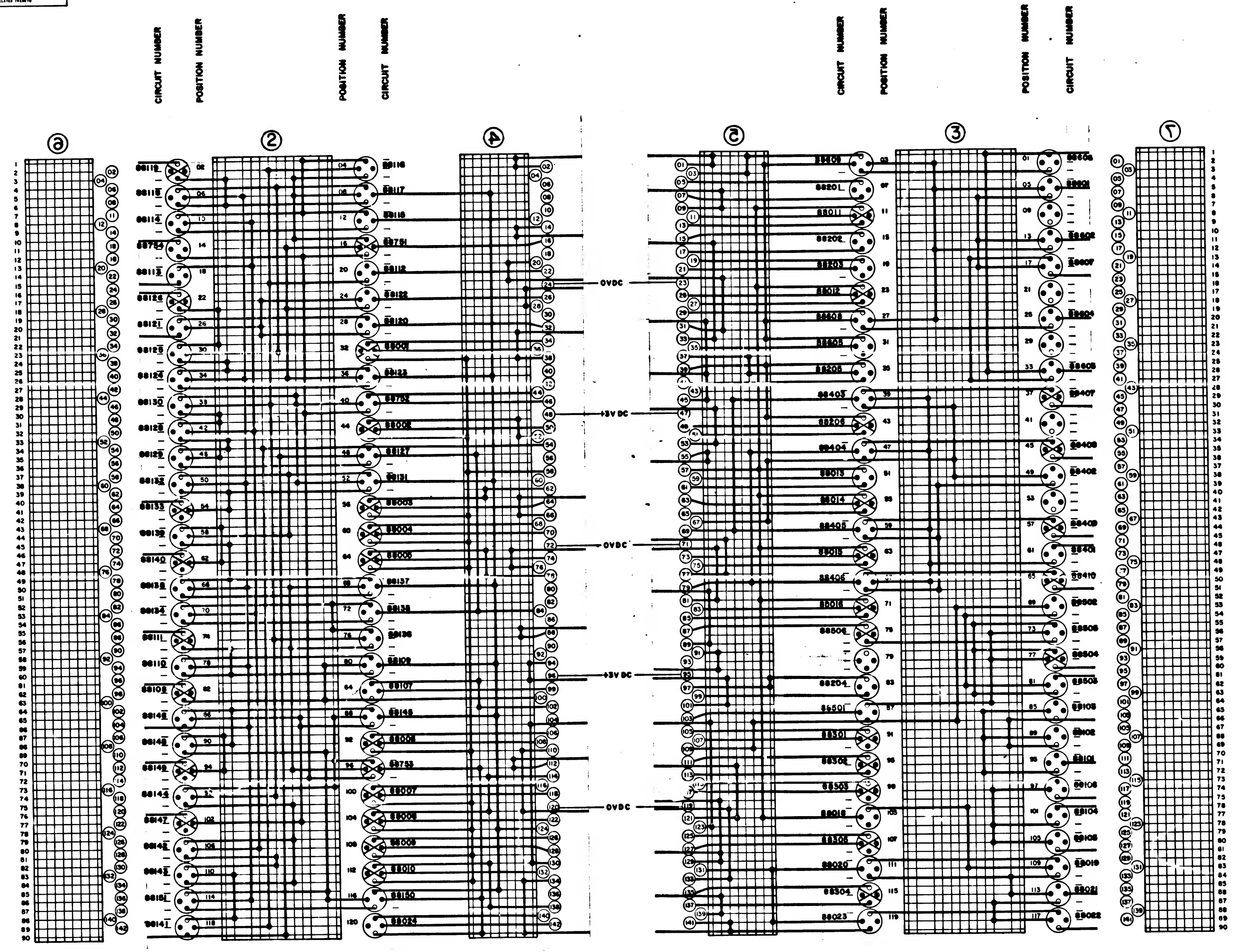
SYM	DESCRIPTION	DATE	APPROVAL

REVISIONS



REF. DWG.
LLOGIC FLOW DIAGRAM 1006559

NOTES-

1- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2- DENOTES "FAN IN" CIRCUIT (+3V DC LEAD NOT CONNECTED)

3- DENOTES "NOR" CIRCUIT

REF. DWG. 1006013

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

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APPLICATION

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MATERIAL
SEE NOTE 5

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DRAWN W.F. Troy DATE 8/22/63
CHECKED
APPROVAL W.B. Lunson 9/10/63
APPROVAL
NASA APPROVAL 9/12/63
MIT APPROVAL 12 Sep 63

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SIGNAL WIRING DIAGRAM
LOGIC MODULE NO. A-29

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006139
SCALE 2/1 | WT | SHEET 1 OF 1

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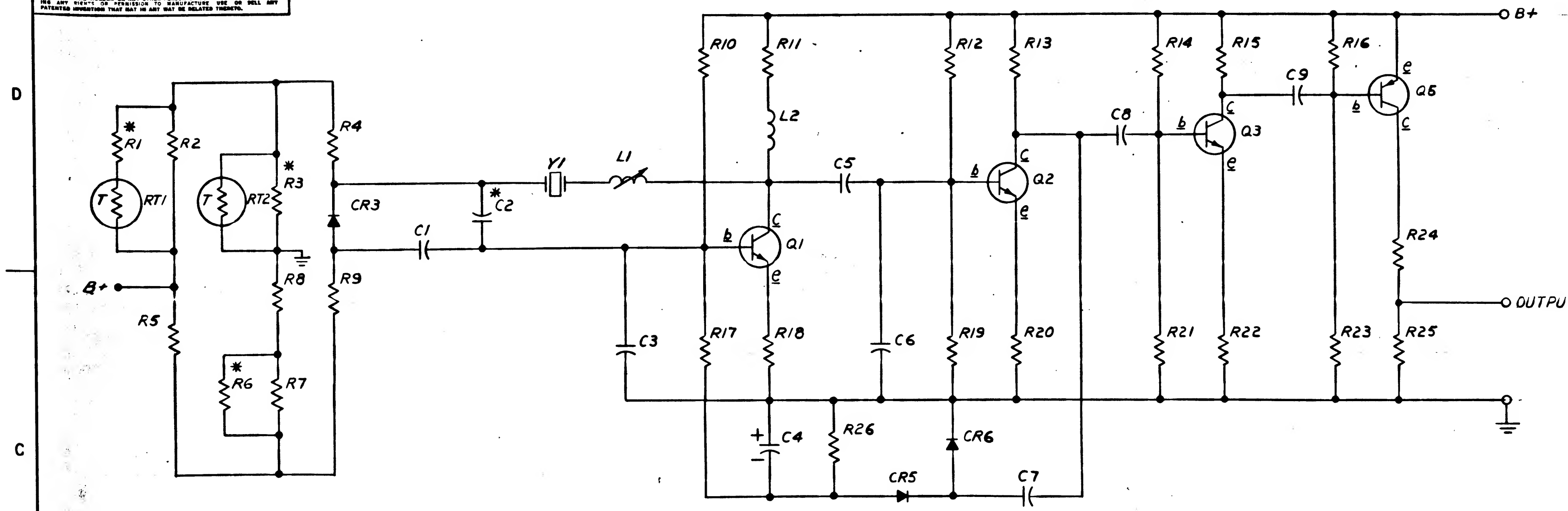
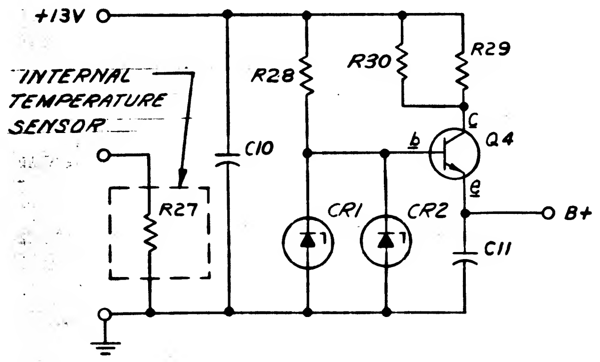
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
—	CLASS B RELEASE PER TDRR 01853	7/2/63	
A	REVISED PER TDRR 02855	8/22/63	

REV A REPLACED BY REV B PER TDRR





NOTES:
1.

FOR INFORMATION ONLY
CLASS B RELEASE TDRR No 01853 DATE 7/2/63

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752	↑			
Q3	1006752				
Q4	1006752	↓			
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL		
R2	1006750-	↑	TBS		
R3	1006750		NOMINAL		
R4	1006750-		TBS		
R5	1006750-		TBS		
R6	1006750		NOMINAL		
R7	1006750-		TBS		
R8	1006750-		TBS		
R9	1006750-		TBS		
R10	1006750-82		120K		
R11	1006750-8		100Ω		
R12	1006750-74		56K		
R13	1006750-42		2.7K		
R14	1006750-74		56K		
R15	1006750-40		2.2K		
R16	1006750-72		47K		
R17	1006750-		TBS		
R18	1006750-8		100Ω		
R19	1006750-60		15K		
R20	1006750-8		100Ω		
R21	1006750-60		15K		
R22	1006750-1		51Ω		
R23	1006750-80		100K		
R24	1006750-40		2.2K		
R25	1006750-25		510Ω		
R26	1006750-56		10K		
R27			TBS		
R28	1006750-		TBS		
R29	1006750-	↓	TBS		
R30	1006750	RESISTOR	TBS		

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-7	CAPACITOR	1000 UUF		
C2	1006793	↑	NOMINAL		
C3	1006793-7		1000 UUF		
C4	1006755-31		10 UF		
C5	1006793-7		1000 UUF		
C6	1006793-3		680 UUF		
C7	1006793		.001 UF		
C8	1006793		.001 UF		
C9	1006793		22UUF		
C10	1006755-79	↓	6.8UF		35V
C11	1006755-79	CAPACITOR	6.8UF		35V
CR1	1006704	ZENER			
CR2	1006704	ZENER			
CR3	1006700	DIODE	PS1947		
CR5	1006751	DIODE			
CR6	1006751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22 Uh		
Y1	1006847	XTAL	HC-27/U		
RT1		THERMISTOR	100K		
RT2		THERMISTOR	4K		

OBSOLETE

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

REF DRAWING
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NEXT ASSY	USED ON
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DRAWN W. J. Mills DATE MAY-14 63
CHECKED
APPROVAL 7/3/63
APPROVAL 6/28/63
APPROVAL 6/28/63
NASA APPROVAL 7/2/63
MIT APPROVAL
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. ——— SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 1 OF 1

INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

1006140 A

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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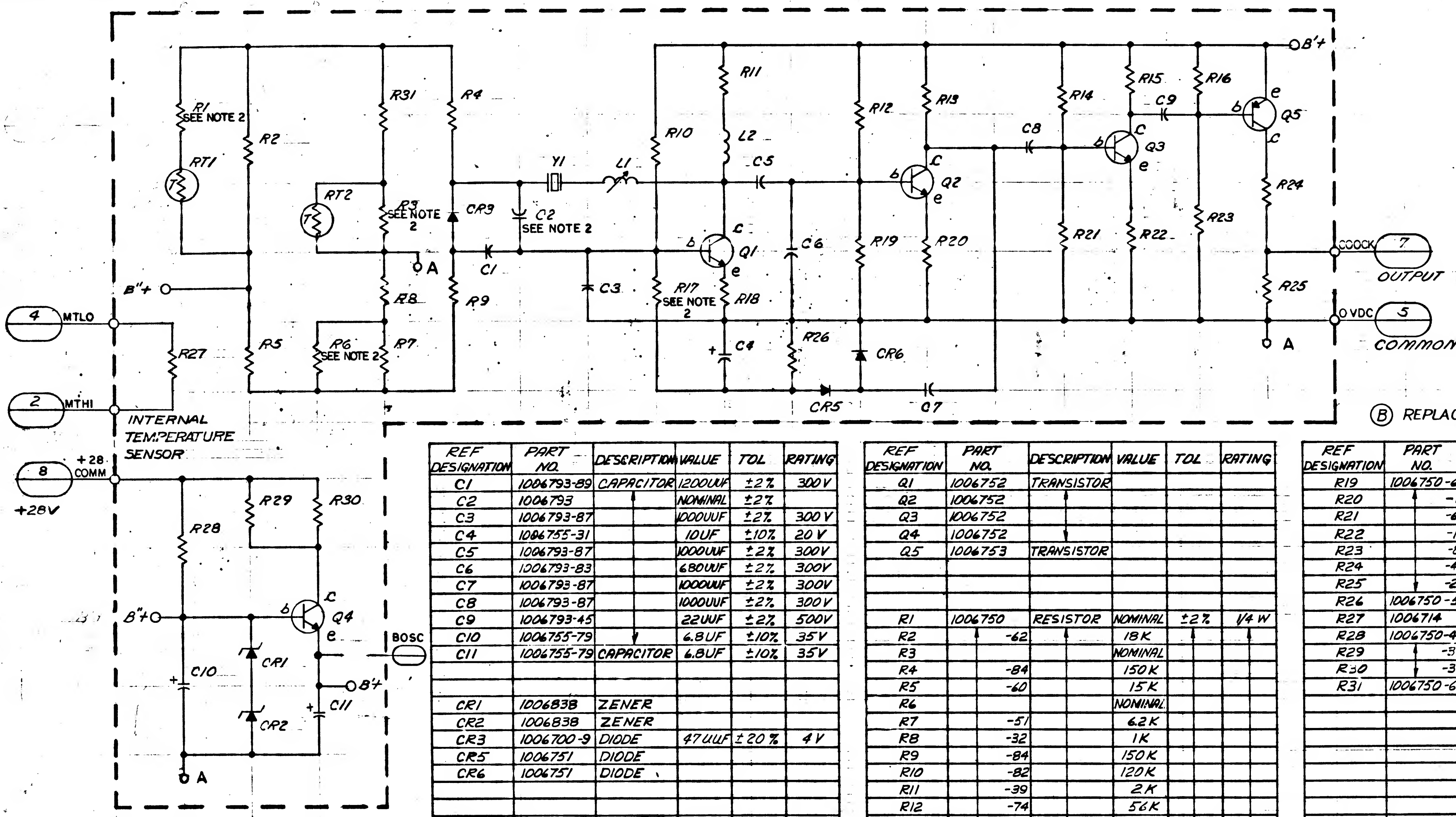
REVISIONS			
SYM	DESCRIPTION 01F53	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02453	8-26-63	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300V
C4	1006755-31		10UF	±10%	20V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79	CAPACITOR	6.8UF	±10%	35V
CR1	1006838	ZENER			
CR2	1006838	ZENER			
CR3	1006700-9	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			
CR6	1006751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715	THERMISTOR			
RT2	1006712	THERMISTOR			

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2	-62		18K		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8	-32		1K		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-74		56K		
R13	-42		2.7K		
R14	-74		56K		
R15	-40		2.2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-40		2.2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-62	RESISTOR	18K	±2%	1/4 W

NOTES

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R3, R6 & R17 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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DWG. NO.
CONTRACT
DRAWN J. A. Zaffino DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL 27 Aug 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006140 B

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REVISIONS 01853

SYM	DESCRIPTION	DATE	APPROVAL
B	REV & REDRAWN / TDRR 02855		

R3

DASH NO.	OHMS ± 2 %
1006750-25	510
-26	560
-27	620
-28	680
-29	750
-30	820
-31	910
-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
1006750-48	4700

R6

DASH NO.	OHMS ± 2 %
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
-48	4700
-49	5100
-50	5600
-51	6200
-52	6800
-53	7500
-54	8200
-55	9100
1006750-56	10K

R1

DASH NO.	OHMS ± 2 %
1006750-57	11K
-58	12K
-59	13K
-60	15K
-61	16K
-62	18K
-63	20K
1006750-64	22K

R17

DASH NO.	OHMS ± 2 %
1006750-55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13 K
1006750-60	15K

C2

DASH NO.	VALUE μμf
1006793-37	10
-38	11
-39	12
-40	13
-41	15
-42	16
-43	18
-44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793-61	100

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN F.L. Mehan DATE 22 Aug 63
CHECKED R.H. Edwards 23 Aug 63
APPROVAL
APPROVAL 28 Aug 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

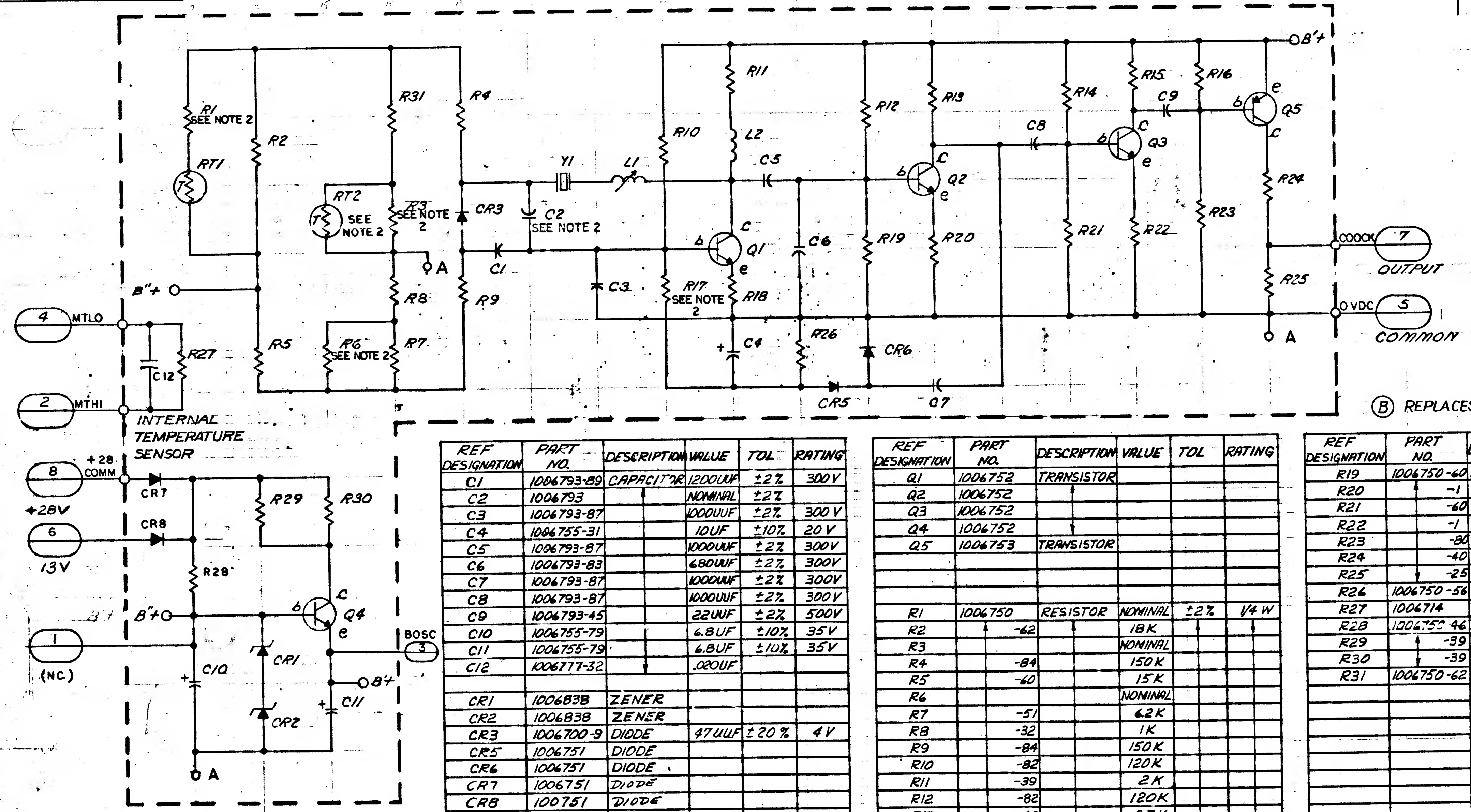
1006140 B

1006140

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	DESCRIPTION 01F53	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02455	5-26-63	
C	REVISED PER TDRR 03223	9-12-63	WK



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300V
C4	1006755-31		10UF	±10%	20V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32		.020UF		
CR1	1006838	ZENER			
CR2	1006838	ZENER			
CR3	1006700-9	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2	-62		18K		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8	-32		1K		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-40		2.2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-40		2.2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-62	RESISTOR	18K	±2%	1/4 W

NOTES

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R3, R6, R17 & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO.
CONTRACT
DRAWN J.A. Zaffino DATE 22AUG63
CHECKED 23Aug63
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

1006140 C

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 01853			
SYM	DESCRIPTION	DATE	APPROVAL
B	REV & REDRAWN / TDRR 02855		
C	REVISED PER TDRR 03223	7-12-63	EPK WII

R3	
DASH NO.	OHMS ± 2 %
1006750-25	510
-26	560
-27	620
-28	680
-29	750
-30	820
-31	910
-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
1006750-48	4700

R6	
DASH NO.	OHMS ± 2 %
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
-48	4700
-49	5100
-50	5600
-51	6200
-52	6800
-53	7500
-54	8200
-55	9100
1006750-56	10K

R1	
DASH NO.	OHMS ± 2 %
1006750-57	11K
-58	12K
-59	13K
-60	15K
-61	16K
-62	18K
-63	20K
1006750-64	22K

R17	
DASH NO.	OHMS ± 2 %
1006750-55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13K
1006750-60	15K

C2	
DASH NO.	VALUE µµf
1006793-37	10
-38	11
-39	12
-40	13
-41	15
-42	16
-43	18
-44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793-61	100

RT 2	
DASH NO.	OHMS
1006712-1	500
-2	1000
-3	5000

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

HEAT TREATMENT

FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

DRAWN F. L. Mehan DATE 22 Aug 63
CHECKED R. H. Edwards 23 Aug 63
APPROVAL
APPROVAL 26 Aug 63

NASA APPROVAL
MIT APPROVAL
MIT APPROVAL 8/28/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 2

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

REVISIONS			
[illegible]	REV E REDRAWN / TDRR [illegible]	[illegible]	[illegible]
C	REVISED PER TDRR [illegible]	[illegible]	[illegible]
D	REPLACED BY REV E WITH CHANGES PER TDRR 05789	[illegible]	WK

R3	
DASH NO.	OHMS ±2%
1006750-25	510
-26	560
-27	620
-28	680
-29	750
-30	820
-31	910
-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
1006750-48	4700

R6	
DASH NO.	OHMS ±2%
1006750-32	1000
-33	1100
-34	1200
-35	1300
-36	1500
-37	1600
-38	1800
-39	2000
-40	2200
-41	2400
-42	2700
-43	3000
-44	3300
-45	3600
-46	3900
-47	4300
-48	4700
-49	5100
-50	5600
-51	6200
-52	6800
-53	7500
-54	8200
-55	9100
1006750-56	10K

R1	
DASH NO.	OHMS ±2%
1006750-57	11 K
-58	12 K
-59	13K
-60	15K
-61	16K
-62	18K
-63	20K
1006750-64	22K

R17	
DASH NO.	OHMS ±2%
1006750-55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13 K
1006750-60	15K

C2	
DASH NO.	VALUE μμf
1006793-37	10
-38	11
-39	12
-40	13
-41	15
-42	16
-43	18
-44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793-61	100

RT 2	
DASH NO.	OHMS
1006712-1	500
-2	1000
-3	5000

Ⓓ REPLACED BY REV E WITH CHANGES

1006140 D

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
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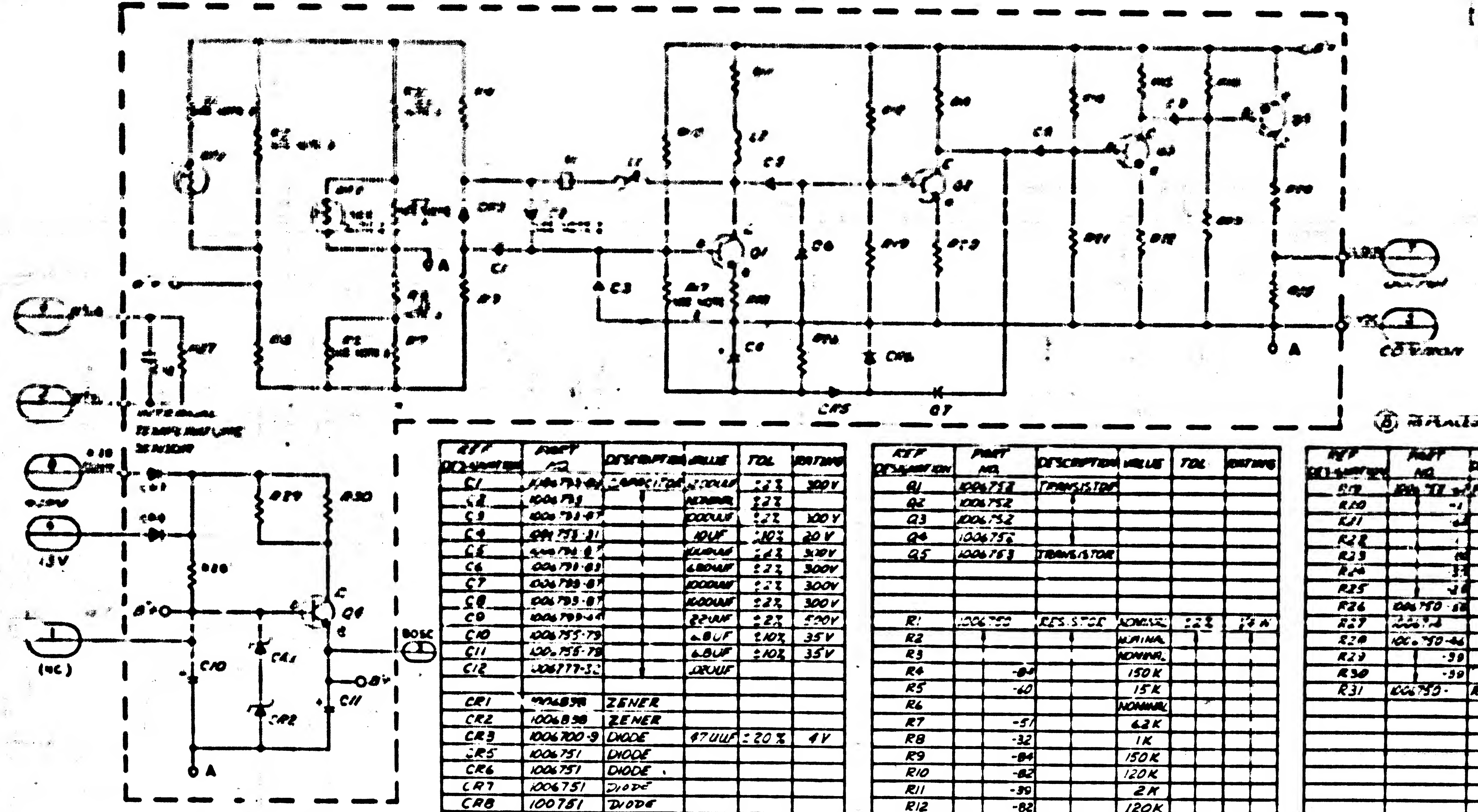
MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN F L Mehan DATE 22 Aug 63
CHECKED R.W. Edwards 23 Aug 63
APPROVAL
APPROVAL [illegible] 24 Aug 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL [illegible] 8/28/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 2



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	[illegible]	CAPACITOR	[illegible]	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	100V
C4	1006755-81		10UF	±10%	20V
C5	[illegible]		[illegible]	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-[illegible]		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32		.020UF		
CR1	1006838	ZENER			
CR2	1006838	ZENER			
CR3	1006700-9	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2			NOMINAL		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8	-32		1K		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-40		2.2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-[illegible]	RESISTOR	[illegible]	±2%	1/4 W
R20	-1		[illegible]		
R21	[illegible]		15K		
R22	[illegible]		51		
R23	[illegible]		100K		
R24	[illegible]		2K		
R25	[illegible]		510		
R26	1006750-[illegible]		10K	±2%	1/4 W
R27	[illegible]				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

NOTES

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

MASTER

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

UNLESS OTHERWISE SPECIFIED
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CAMBRIDGE MASS
DRAWN
DATE
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

[illegible]

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789		

R3					
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 25	510	1006750 - 43	3 K	1006750 - 143	14 K
- 109	535	- 127	3.15K	- 60	15 K
- 26	560	- 44	3.3K	- 144	15.5K
- 110	590	- 128	3.45K	- 61	16 K
- 27	620	- 45	3.6K	- 145	17 K
- 111	650	- 129	3.75K	- 62	18 K
- 28	680	- 46	3.9K	- 146	19 K
- 112	715	- 130	4.1K	- 63	20K
- 29	750	- 47	4.3K	- 147	21K
- 113	785	- 131	4.5K	- 64	22K
- 30	820	- 48	4.7K	- 148	23K
- 114	865	- 132	4.9K	- 65	24K
- 31	910	- 49	5.1K	- 149	25.5K
- 115	955	- 133	5.35K	- 66	27K
- 32	1 K	- 50	5.6K	- 150	28.5K
- 116	1.05K	- 134	5.9K	- 67	30K
- 33	1.1K	- 51	6.2K	- 151	31.5K
- 117	1.15K	- 135	6.5K	- 68	33K
- 34	1.2K	- 52	6.8K	- 152	34.5K
- 118	1.25K	- 136	7.15K	- 69	36K
- 35	1.3K	- 53	7.5K	- 153	37.5K
- 119	1.4K	- 137	7.85K	- 70	39K
- 36	1.5K	- 54	8.2K	- 154	41K
- 120	1.55K	- 138	8.65K	- 71	43K
- 37	1.6K	- 55	9.1K	- 155	45K
- 121	1.7K	- 139	9.55K	- 72	47K
- 38	1.8K	- 56	10K	- 156	49K
- 122	1.9K	- 140	10.5K	- 73	51K
- 39	2.0K	- 57	11 K	- 157	53.5K
- 123	2.1K	- 141	11.5K	- 74	56K
- 40	2.2K	- 58	12 K	- 158	59K
- 124	2.3K	- 142	12.5K	1006750 - 75	62K
- 41	2.4K	1006750 - 59	13K		
- 125	2.55K				
- 42	2.7K				
1006750 - 126	2.85K				

R6			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 32	1 K	1006750 - 51	6.2 K
- 116	1.05K	- 135	6.5 K
- 33	1.1 K	- 52	6.8 K
- 117	1.15K	- 136	7.15 K
- 34	1.2 K	- 53	7.5 K
- 118	1.25K	- 137	7.85K
- 35	1.3 K	- 54	8.2 K
- 119	1.4 K	- 138	8.65K
- 36	1.5K	- 55	9.1 K
- 120	1.55K	- 139	9.55K
- 37	1.6K	- 56	10 K
- 121	1.7K	- 140	10.5K
- 38	1.8K	- 57	11 K
- 122	1.9K	- 141	11.5K
- 39	2.0K	- 58	12 K
- 123	2.1K	- 142	12.5K
- 40	2.2K	- 59	13 K
- 124	2.3K	- 143	14 K
- 41	2.4K	- 60	15 K
- 125	2.55K	- 144	15.5K
- 42	2.7K	- 61	16K
- 126	2.85K	- 145	17K
- 43	3 K	- 62	18K
- 127	3.15K	- 146	19K
- 44	3.3K	- 63	20K
- 128	3.45K	- 147	21K
- 45	3.6K	- 64	22K
- 129	3.75K	- 148	23K
- 46	3.9K	- 65	24K
- 130	4.1K	- 149	25.5K
- 47	4.3K	- 66	27K
- 131	4.5K	- 150	28.5K
- 48	4.7K	- 67	30K
- 132	4.9K	- 151	31.5K
- 49	5.1K	1006750 - 68	33K
- 133	5.35K		
- 50	5.6K		
1006750 - 134	5.9K		

R8			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 25	510	1006750 - 43	3 K
- 109	535	- 127	3.15 K
- 26	560	- 44	3.3 K
- 110	590	- 128	3.45 K
- 27	620	- 45	3.6 K
- 111	650	- 129	3.75K
- 28	680	- 46	3.9 K
- 112	715	- 130	4.1 K
- 29	750	- 47	4.3K
- 113	785	- 131	4.5K
- 30	820	- 48	4.7K
- 114	865	- 132	4.9K
- 31	910	- 49	5.1K
- 115	955	- 133	5.35K
- 32	1 K	- 50	5.6K
- 116	1.05 K	- 134	5.9K
- 33	1.1 K	- 51	6.2K
- 117	1.15K	- 135	6.5K
- 34	1.2K	- 52	6.8K
- 118	1.25K	- 136	7.15K
- 35	1.3K	- 53	7.5K
- 119	1.4K	- 137	7.85K
- 36	1.5K	- 54	8.2K
- 120	1.55K	- 138	8.65K
- 37	1.6K	- 55	9.1 K
- 121	1.7K	- 139	9.55K
- 38	1.8K	- 56	10 K
- 122	1.9K	- 140	10.5K
- 39	2.0K	- 57	11 K
- 123	2.1K	- 141	11.5K
- 40	2.2K	1006750 - 58	12K
- 124	2.3K	1006757 - 11	0
- 41	2.4K		
- 125	2.55K		
- 42	2.7K		
1006750 - 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL 4 FEB 64
NASA APPROVAL 2/17/64
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 3

[illegible]
[illegible]

[illegible]
[illegible]

DASH NO	OHMS
[illegible]	[illegible]
-151	37.5
-70	39
-154	41
-71	43
-155	45
-72	47
-156	49
1006750 - 73	51

RT 2	
DASH NO	OHMS
1006712 - 1	[illegible]
1006712 - 2	1000
1006712 - 3	[illegible]

R 17	
DASH NO	OHMS ±2%
1006750 - 56	5.1 K
-86	10 K
-57	11 K
-58	12 K
-59	13 K
1006750 -60	14 K

C 2	
DASH NO.	VALUE UUF
1006793 - 37	10
- 38	11
- 39	12
- 40	13
- 41	15
- 42	16
- 43	18
- 44	20
- 45	22
- 46	24
- 47	27
- 48	30
- 49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793 -61	100

Ⓔ THIS SHEET ADDED

MASTER

1006140 E

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS

DRAWN E. [illegible] DATE [illegible]
CHECKED [illegible]
APPROVAL
APPROVAL [illegible] 64
NASA APPROVAL [illegible]
MIT APPROVAL [illegible] 4 Feb 64

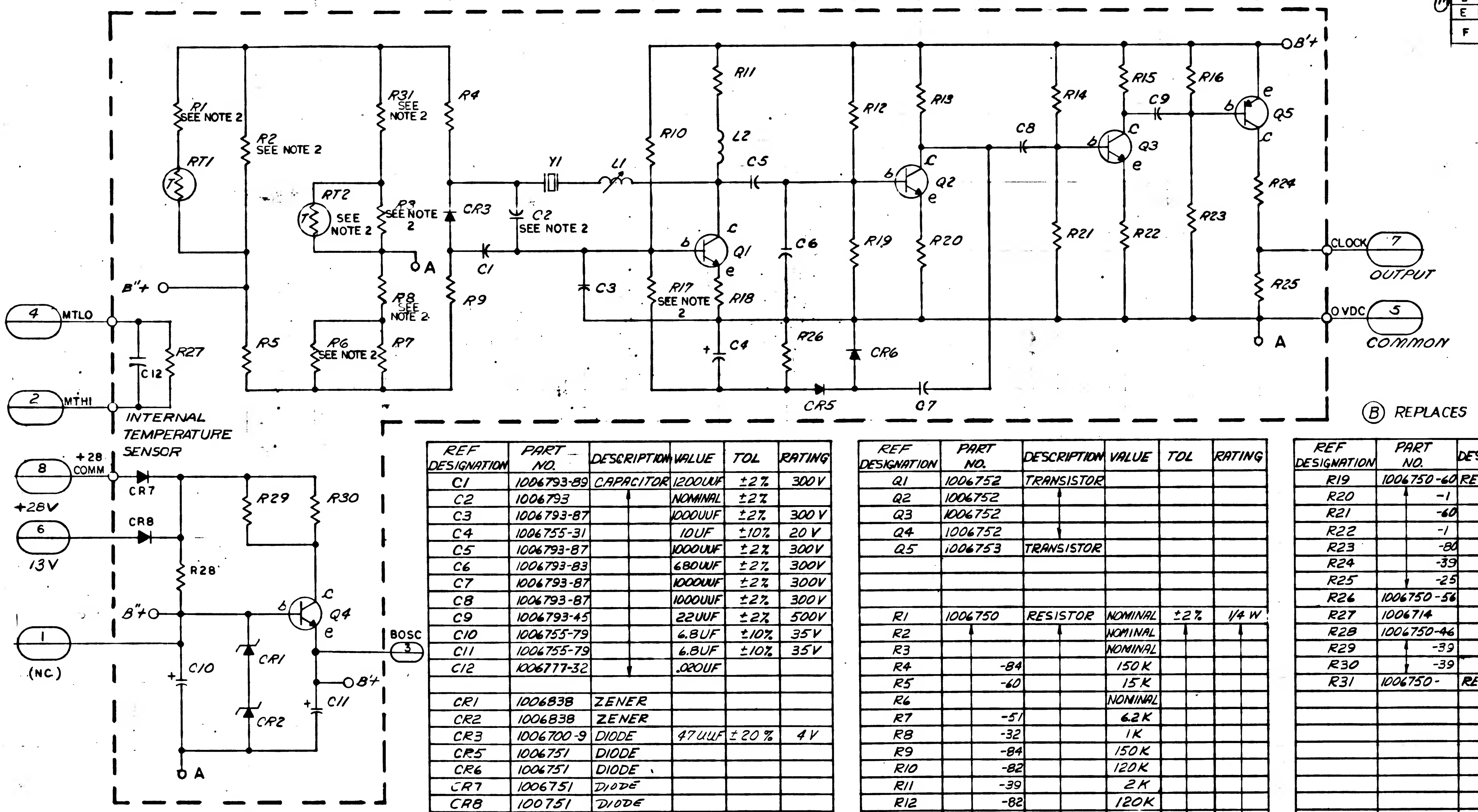
MANNED SPACECRAFT CENTER
HOUSTON TEXAS

SCHEMATIC AGC CLOCK OSC MODULE B6

CODE IDENT NO
SIZE D
NASA DRAWING NO 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01153	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02455	5-26-63	
C	REVISED PER TDRR 03223	9-1-63	WK
D	REVISED PER TDRR 05789	1-21-64	WL
E	REVISED PER TDRR 05789	1-21-64	WL
F	REVISED PER TDRR 07062 DR CHK	12 Nov 64	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300 V
C4	1006755-31		10UF	±10%	20 V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300 V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32		.020UF		
CR1	1006838	ZENER			
CR2	1006838	ZENER			
CR3	1006700-9	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2			NOMINAL		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8	-32		1K		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

NOTES

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN J. A. Zuffone DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL E. C. Hall 28 Aug 63
NASA APPROVAL Jack Barnard
MIT APPROVAL
MIT APPROVAL 8/26/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

(M)

SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789	2 Jan 64	[illegible]
F	REVISED PER TDRR DR[illegible] CHK [illegible] 07062	2 Nov 64	[illegible]

R3

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 25	510	1006750 - 43	3 K	1006750 - 143	14 K
- 109	535	- 127	3.15K	- 60	15 K
- 26	560	- 44	3.3K	- 144	15.5K
- 110	590	- 128	3.45K	- 61	16 K
- 27	620	- 45	3.6K	- 145	17 K
- 111	650	- 129	3.75K	- 62	18 K
- 28	680	- 46	3.9K	- 146	19 K
- 112	715	- 130	4.1K	- 63	20K
- 29	750	- 47	4.3K	- 147	21K
- 113	785	- 131	4.5K	- 64	22K
- 30	820	- 48	4.7K	- 148	23K
- 114	865	- 132	4.9K	- 65	24K
- 31	910	- 49	5.1K	- 149	25.5K
- 115	955	- 133	5.35K	- 66	27K
- 32	1 K	- 50	5.6K	- 150	28.5K
- 116	1.05K	- 134	5.9K	- 67	30K
- 33	1.1 K	- 51	6.2K	- 151	31.5K
- 117	1.15K	- 135	6.5K	- 68	33K
- 34	1.2K	- 52	6.8K	- 152	34.5K
- 118	1.25K	- 136	7.15K	- 69	36K
- 35	1.3 K	- 53	7.5K	- 153	37.5K
- 119	1.4K	- 137	7.85K	- 70	39K
- 36	1.5K	- 54	8.2K	- 154	41K
- 120	1.55K	- 138	8.65K	- 71	43K
- 37	1.6 K	- 55	9.1 K	- 155	45K
- 121	1.7K	- 139	9.55K	- 72	47K
- 38	1.8K	- 56	10K	- 156	49K
- 122	1.9K	- 140	10.5K	- 73	51K
- 39	2.0K	- 57	11 K	- 157	53.5K
- 123	2.1K	- 141	11.5K	- 74	56K
- 40	2.2K	- 58	12 K	- 158	59K
- 124	2.3K	- 142	12.5K	1006750 - 75	62K
- 41	2.4K	1006750 - 59	13K		
- 125	2.55K				
- 42	2.7K				
1006750 - 126	2.85K				

R6

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 32	1 K	1006750 - 51	6.2 K
- 116	1.05K	- 135	6.5 K
- 33	1.1 K	- 52	6.8 K
- 117	1.15K	- 136	7.15 K
- 34	1.2 K	- 53	7.5 K
- 118	1.25K	- 137	7.85K
- 35	1.3 K	- 54	8.2 K
- 119	1.4 K	- 138	8.65K
- 36	1.5K	- 55	9.1 K
- 120	1.55K	- 139	9.55K
- 37	1.6 K	- 56	10 K
- 121	1.7K	- 140	10.5K
- 38	1.8K	- 57	11 K
- 122	1.9K	- 141	11.5K
- 39	2.0K	- 58	12 K
- 123	2.1K	- 142	12.5K
- 40	2.2K	- 59	13 K
- 124	2.3K	- 143	14 K
- 41	2.4K	- 60	15 K
- 125	2.55K	- 144	15.5K
- 42	2.7 K	- 61	16 K
- 126	2.85K	- 145	17 K
- 43	3 K	- 62	18K
- 127	3.15K	- 146	19K
- 44	3.3K	- 63	20K
- 128	3.45K	- 147	21K
- 45	3.6K	- 64	22K
- 129	3.75K	- 148	23K
- 46	3.9K	- 65	24K
- 130	4.1 K	- 149	25.5K
- 47	4.3K	- 66	27K
- 131	4.5K	- 150	28.5K
- 48	4.7K	- 67	30K
- 132	4.9K	- 151	31.5K
- 49	5.1 K	1006750 - 68	33K
- 133	5.35K		
- 50	5.6K		
1006750 - 134	5.9K		

R8

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 25	510	1006750 - 43	3 K
- 109	535	- 127	3.15 K
- 26	560	- 44	3.3 K
- 110	590	- 128	3.45 K
- 27	620	- 45	3.6 K
- 111	650	- 129	3.75K
- 28	680	- 46	3.9 K
- 112	715	- 130	4.1 K
- 29	750	- 47	4.3K
- 113	785	- 131	4.5K
- 30	820	- 48	4.7K
- 114	865	- 132	4.9K
- 31	910	- 49	5.1K
- 115	955	- 133	5.35K
- 32	1 K	- 50	5.6K
- 116	1.05 K	- 134	5.9K
- 33	1.1 K	- 51	6.2K
- 117	1.15K	- 135	6.5K
- 34	1.2K	- 52	6.8K
- 118	1.25K	- 136	7.15K
- 35	1.3K	- 53	7.5K
- 119	1.4 K	- 137	7.85K
- 36	1.5K	- 54	8.2K
- 120	1.55K	- 138	8.65K
- 37	1.6 K	- 55	9.1 K
- 121	1.7K	- 139	9.55K
- 38	1.8K	- 56	10K
- 122	1.9K	- 140	10.5K
- 39	2.0K	- 57	11 K
- 123	2.1K	- 141	11.5K
- 40	2.2K	1006750 - 58	12K
- 124	2.3K	1006757 - 11	0
- 41	2.4K		
- 125	2.55K		
- 42	2.7K		
1006750 - 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

HEAT TREATMENT

FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

DRAWN J.F. Walsh DATE 1/27/64
CHECKED [illegible] 3 FEB 64
APPROVAL
APPROVAL E.I. [illegible] 4 FEB 64
NASA APPROVAL [illegible] 2/14/64
MIT APPROVAL [illegible] 4 Feb 64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	21 Jan 64	
F	REVISED PER TDRR DR CHK 07062	12 Nov 64	

R 31

DASH NO.	OHMS ±2%
1006750 - 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
- 64	22K
- 148	23K
- 65	24K
- 149	25.5K
- 66	27 K
- 150	28.5K
- 67	30 K
- 151	31.5 K
- 68	33 K
- 152	34.5 K
- 69	36 K
- 153	37.5 K
- 70	39 K
- 154	41 K
1006750 - 71	43K

R 1

DASH NO.	OHMS ±2%
1006750 - 52	6.8 K
- 136	7.15 K
- 53	7.5 K
- 137	7.85 K
- 54	8.2 K
- 138	8.65K
- 55	9.1 K
- 139	9.55K
- 56	10 K
- 140	10.5K
- 57	11 K
- 141	11.5K
- 58	12 K
- 142	12.5K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20K
- 147	21 K
1006750 - 64	22K

R 2

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 56	10 K	1006750 - 157	53.5 K
- 140	10.5K	- 74	56 K
- 57	11 K	- 158	59 K
- 141	11.5 K	- 75	62 K
- 58	12 K	- 159	65 K
- 142	12.5 K	- 76	68 K
- 59	13 K	- 160	71.5 K
- 143	14 K	- 77	75 K
- 60	15 K	- 161	78.5 K
- 144	15.5K	- 78	82K
- 61	16 K	- 162	86.5K
- 145	17 K	- 79	91 K
- 62	18 K	- 163	95.5K
- 146	19 K	- 80	100K
- 63	20 K	- 164	105 K
- 147	21 K	- 81	110K
- 64	22K	- 165	115 K
- 148	23K	- 82	120K
- 65	24K	- 166	125K
- 149	25.5K	- 83	130K
- 66	27K	- 167	140K
- 150	28.5K	1006750 - 84	150K
- 67	30 K		
- 151	31.5		
- 68	33		
- 152	34.5		
- 69	36		
- 153	37.5		
- 70	39		
- 154	41		
- 71	43		
- 155	45		
- 72	47		
- 156	49		
1006750 - 73	51		

RT 2

DASH NO.	OHMS ±2%
1006712 - 1	500
1006712 - 2	1000
1006712 - 3	5000

C 2

DASH NO.	VALUE UUF
1006793 - 37	10
- 38	11
- 39	12
- 40	13
- 41	15
- 42	16
- 43	18
- 44	20
- 45	22
- 46	24
- 47	27
- 48	30
- 49	33
- 50	36
- 51	39
- 52	43
- 53	47
- 54	51
- 55	56
- 56	62
- 57	68
- 58	75
- 59	82
- 60	91
1006793 - 61	100

R 17

DASH NO	OHMS ±2%
1006750 - 55	9.1 K
- 56	10 K
- 57	11 K
- 58	12 K
- 59	13 K
1006750 - 60	14 K

Ⓔ THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN DATE 1/29/64
CHECKED 3 Feb 64
APPROVAL
APPROVAL 5 Feb. 64
NASA APPROVAL 12/17/64
MIT APPROVAL 4 Feb 64

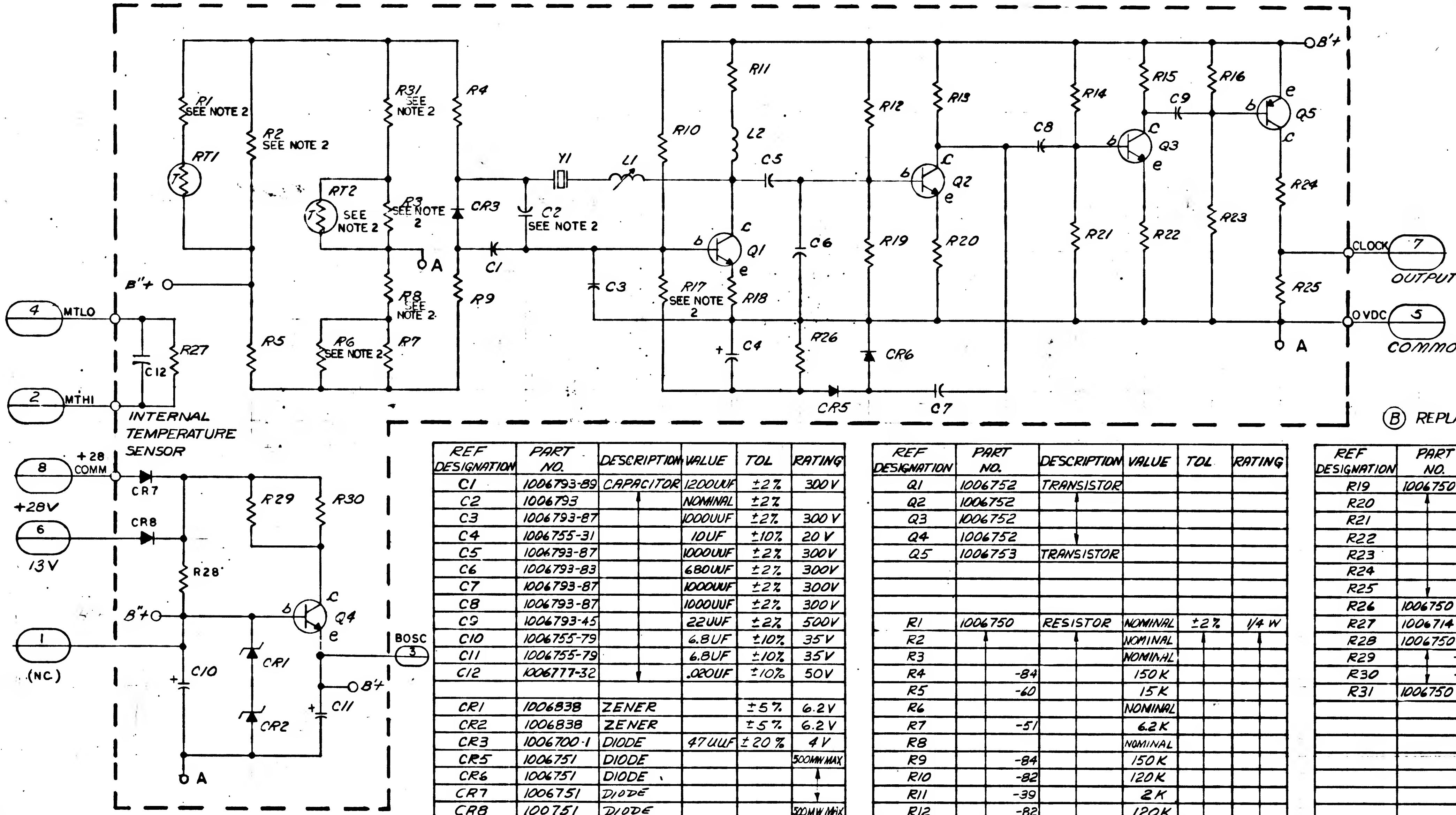
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01153	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02155	8-26-63	
C	REVISED PER TDRR 03223	9-12-63	WK
D	REVISED PER TDRR 05789	1-21-64	TFW WC
E	REVISED PER TDRR 05789	1-21-64	TFW WC
F	REVISED PER TDRR 07062 DR CHK	22 Nov 64	
G	REVISED PER TDRR 08408 DR R.W.DuPont CHK A.P.B	5/7/69	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793	↑	NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300V
C4	1006755-31		10UF	±10%	20V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32	↓	.020UF	±10%	50V
CR1	1006838	ZENER		±5%	6.2V
CR2	1006838	ZENER		±5%	6.2V
CR3	1006700-1	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			500MW MAX
CR6	1006751	DIODE			↑
CR7	1006751	DIODE			↓
CR8	100751	DIODE			500MW MAX
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752	↑			
Q3	1006752				
Q4	1006752	↓			
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2	↑	↑	NOMINAL	↑	↑
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8			NOMINAL		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2K		
R16	-72		47K		
R17	↓	↓	NOMINAL	↓	↓
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	↑ -1	↑	51	↑	↑
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	↓ -25		510	↓	↓
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	↑ -39		2K	↑	↑
R30	↓ -39	↓	2K	↓	↓
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

REF DRAWING: 1003526 AGC OSC. ASSEM

NOTES
1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
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FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.A. Zaffini DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL 28 Aug 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —— SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789	2/Jan 64	
F	REVISED PER TDRR DR CHK 07062	12 Mar 64	
G	REVISED PER TDRR 08408 DR R W DuPont CHK O.P.B.	5/7/64	

R3					
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 − 25	510	1006750 − 43	3 K	1006750 − 143	14 K
− 109	535	− 127	3.15K	− 60	15 K
− 26	560	− 44	3.3K	− 144	15.5K
− 110	590	− 128	3.45K	− 61	16 K
− 27	620	− 45	3.6K	− 145	17 K
− 111	650	− 129	3.75K	− 62	18 K
− 28	680	− 46	3.9K	− 146	19 K
− 112	715	− 130	4.1K	− 63	20K
− 29	750	− 47	4.3K	− 147	21K
− 113	785	− 131	4.5K	− 64	22K
− 30	820	− 48	4.7K	− 148	23K
− 114	865	− 132	4.9K	− 65	24K
− 31	910	− 49	5.1K	− 149	25.5K
− 115	955	− 133	5.35K	− 66	27K
− 32	1 K	− 50	5.6K	− 150	28.5K
− 116	1.05K	− 134	5.9K	− 67	30K
− 33	1.1 K	− 51	6.2K	− 151	31.5K
− 117	1.15K	− 135	6.5K	− 68	33K
− 34	1.2K	− 52	6.8K	− 152	34.5K
− 118	1.25K	− 136	7.15K	− 69	36K
− 35	1.3K	− 53	7.5K	− 153	37.5K
− 119	1.4K	− 137	7.85K	− 70	39K
− 36	1.5K	− 54	8.2K	− 154	41K
− 120	1.55K	− 138	8.65K	− 71	43K
− 37	1.6K	− 55	9.1 K	− 155	45K
− 121	1.7K	− 139	9.55K	− 72	47K
− 38	1.8K	− 56	10K	− 156	49K
− 122	1.9K	− 140	10.5K	− 73	51K
− 39	2.0K	− 57	11 K	− 157	53.5K
− 123	2.1K	− 141	11.5K	− 74	56K
− 40	2.2K	− 58	12 K	− 158	59K
− 124	2.3K	− 142	12.5K	1006750 − 75	62K
− 41	2.4K	1006750 − 59	13K		
− 125	2.55K				
− 42	2.7K				
1006750 − 126	2.85K				

R6			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 − 32	1 K	1006750 − 51	6.2 K
− 116	1.05K	− 135	6.5 K
− 33	1.1 K	− 52	6.8 K
− 117	1.15K	− 136	7.15 K
− 34	1.2K	− 53	7.5 K
− 118	1.25K	− 137	7.85K
− 35	1.3 K	− 54	8.2 K
− 119	1.4 K	− 138	8.65K
− 36	1.5K	− 55	9.1 K
− 120	1.55K	− 139	9.55K
− 37	1.6K	− 56	10 K
− 121	1.7K	− 140	10.5K
− 38	1.8K	− 57	11 K
− 122	1.9K	− 141	11.5K
− 39	2.0K	− 58	12 K
− 123	2.1K	− 142	12.5K
− 40	2.2K	− 59	13 K
− 124	2.3K	− 143	14 K
− 41	2.4K	− 60	15 K
− 125	2.55K	− 144	15.5K
− 42	2.7K	− 61	16K
− 126	2.85K	− 145	17K
− 43	3 K	− 62	18K
− 127	3.15K	− 146	19K
− 44	3.3K	− 63	20K
− 128	3.45K	− 147	21K
− 45	3.6K	− 64	22K
− 129	3.75K	− 148	23K
− 46	3.9K	− 65	24K
− 130	4.1K	− 149	25.5K
− 47	4.3K	− 66	27K
− 131	4.5K	− 150	28.5K
− 48	4.7K	− 67	30K
− 132	4.9K	− 151	31.5K
− 49	5.1K	1006750 − 68	33K
− 133	5.35K		
− 50	5.6.		
1006750 − 134	5.9K		

R8			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 − 25	510	1006750 − 43	3 K
− 109	535	− 127	3.15 K
− 26	560	− 44	3.3 K
− 110	590	− 128	3.45 K
− 27	620	− 45	3.6 K
− 111	650	− 129	3.75K
− 28	680	− 46	3.9 K
− 112	715	− 130	4.1 K
− 29	750	− 47	4.3K
− 113	785	− 131	4.5K
− 30	820	− 48	4.7K
− 114	865	− 132	4.9K
− 31	910	− 49	5.1K
− 115	955	− 133	5.35K
− 32	1 K	− 50	5.6K
− 116	1.05 K	− 134	5.9K
− 33	1.1 K	− 51	6.2K
− 117	1.15K	− 135	6.5K
− 34	1.2K	− 52	6.8K
− 118	1.25K	− 136	7.15K
− 35	1.3K	− 53	7.5K
− 119	1.4K	− 137	7.85K
− 36	1.5K	− 54	8.2K
− 120	1.55K	− 138	8.65K
− 37	1.6K	− 55	9.1 K
− 121	1.7K	− 139	9.55K
− 38	1.8K	− 56	10 K
− 122	1.9K	− 140	10.5K
− 39	2.0K	− 57	11 K
− 123	2.1K	− 141	11.5K
− 40	2.2K	1006750 − 58	12K
− 124	2.3K	1006757 − 8	0
− 41	2.4K		
− 125	2.55K		
− 42	2.7K		
1006750 − 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
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DO NOT SCALE THIS DRAWING
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MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL 4 FEB 64
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —— SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 2 OF 3

1006140 G

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	21 Jan 64	
F	REVISED PER TDRR DR CHK 07062	12 Mar 64	
●	REVISED PER TDRR 08408 DR R.J. DuPont CHK	5/9/64	

R 31	
DASH NO.	OHMS ±2%
1006750 - 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
- 64	22 K
- 148	23 K
- 65	24 K
- 149	25.5 K
- 66	27 K
- 150	28.5 K
- 67	30 K
- 151	31.5 K
- 68	33 K
- 152	34.5 K
- 69	36 K
- 153	37.5 K
- 70	39 K
- 154	41 K
1006750 - 71	43 K

R 1	
DASH NO.	OHMS ±2%
1006750 - 52	6.8 K
- 136	7.15 K
- 53	7.5 K
- 137	7.85 K
- 54	8.2 K
- 138	8.65 K
- 55	9.1 K
- 139	9.55 K
- 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
1006750 - 64	22 K

R 2			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 56	10 K	1006750 - 157	53.5 K
- 140	10.5 K	- 74	56 K
- 57	11 K	- 158	59 K
- 141	11.5 K	- 75	62 K
- 58	12 K	- 159	65 K
- 142	12.5 K	- 76	68 K
- 59	13 K	- 160	71.5 K
- 143	14 K	- 77	75 K
- 60	15 K	- 161	78.5 K
- 144	15.5 K	- 78	82 K
- 61	16 K	- 162	86.5 K
- 145	17 K	- 79	91 K
- 62	18 K	- 163	95.5 K
- 146	19 K	- 80	100 K
- 63	20 K	- 164	105 K
- 147	21 K	- 81	110 K
- 64	22 K	- 165	115 K
- 148	23 K	- 82	120 K
- 65	24 K	- 166	125 K
- 149	25.5 K	- 83	130 K
- 66	27 K	- 167	140 K
- 150	28.5 K	1006750 - 84	150 K
- 67	30 K		
- 151	31.5 K		
- 68	33 K		
- 152	34.5 K		
- 69	36 K		
- 153	37.5 K		
- 70	39 K		
- 154	41 K		
- 71	43 K		
- 155	45 K		
- 72	47 K		
- 156	49 K		
1006750 - 73	51 K		

RT 2	
DASH NO.	OHMS ±2%
1006712 - 1	500
1006712 - 2	1000
1006712 - 3	5000

R 17	
DASH NO	OHMS ±2%
1006750 - 55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13 K
1006750 -60	14 K

C 2	
DASH	VALUE UUF
1006793 -37	10
-38	11
-39	12
- 40	13
- 41	15
-42	16
-43	18
- 44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793 -61	100

Ⓔ THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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DRAWN DATE 1/27/64
CHECKED
APPROVAL
APPROVAL 3 Feb. 64
NASA APPROVAL
MIT APPROVAL 4 Feb 64

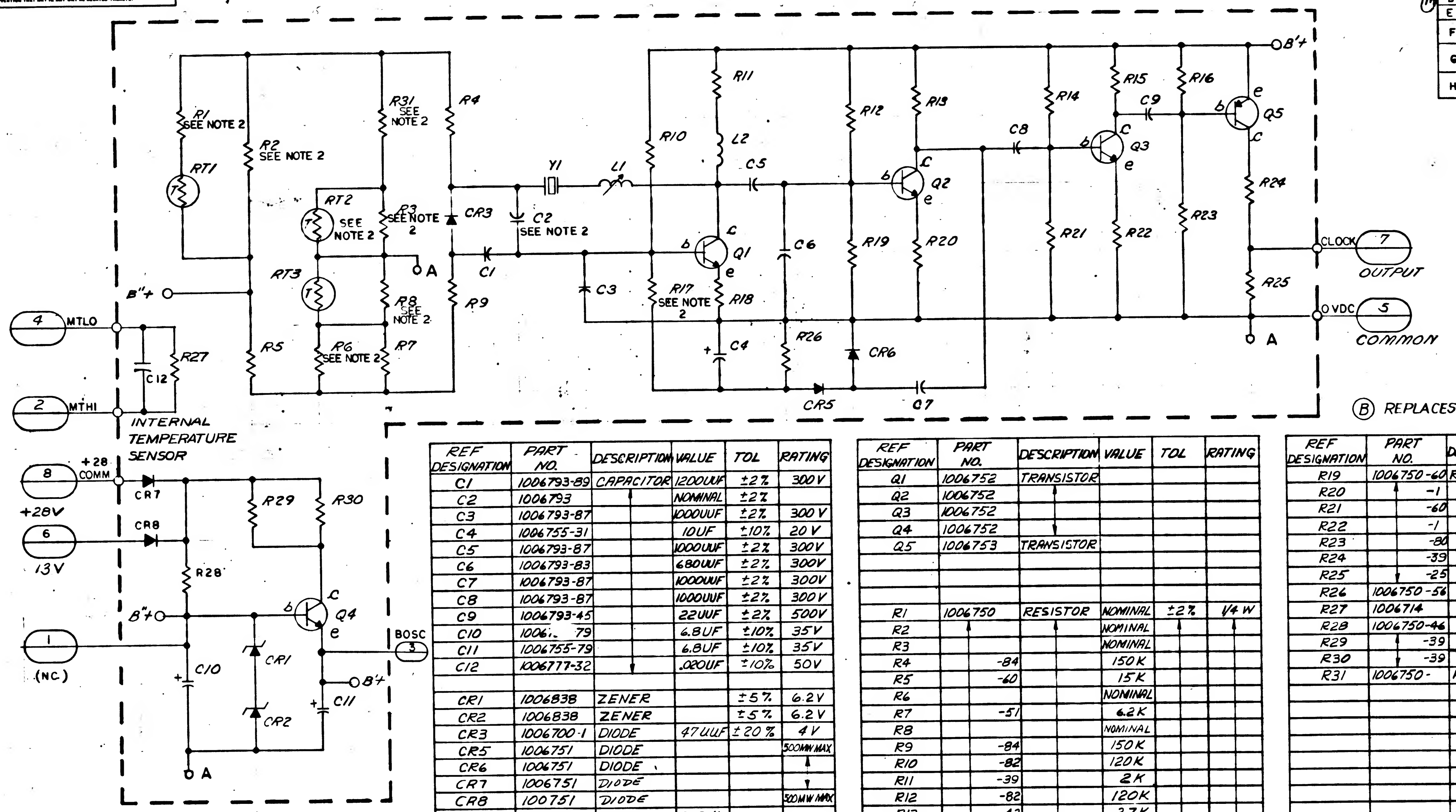
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC AGC CLOCK OSC MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED FURNISHED OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01153	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02155	3-26-63	
C	REVISED PER TDRR 03223	9-19-63	WK
D	REVISED PER TDRR 05789	1-21-64	WL
E	REVISED PER TDRR 05789	1-21-64	WL
F	REVISED PER TDRR 07062 DR CHK	12 Nov 64	
G	REVISED PER TDRR 08408 DR R.U. DuPont CHK A.P.B	5/7/64	
H	REVISED PER TDRR 12630 DR CHK	9/23/64	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300 V
C4	1006755-31		10UF	±10%	20 V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300 V
C9	1006793-45		22UUF	±2%	500V
C10	1006[illegible] 79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32		.020UF	±10%	50V
CR1	1006838	ZENER		±5%	6.2V
CR2	1006838	ZENER		±5%	6.2V
CR3	1006700-1	DIODE	47UUF	±20%	4 V
CR5	1006751	DIODE			500MW MAX
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			500MW MAX
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		
RT3	1006291	THERMISTOR			

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2			NOMINAL		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8			NOMINAL		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

REF DRAWING: 1003526 AGC OSC. ASSEM

NOTES

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN J.A. Zoffon DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL 28 Aug 63
NASA APPROVAL Jack Barnard
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789	2 Jan 64	
F	REVISED PER TDRR DR CHK 07062	2 Mar 64	
G	REVISED PER TDRR 08408 DR CHK Q.R.B.	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	

R3

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 25	510	1006750 - 43	3 K	1006750 - 143	14 K
-109	535	-127	3.15K	-60	15 K
-26	560	-44	3.3K	-144	15.5K
-110	590	-128	3.45K	-61	16 K
-27	620	-45	3.6 K	-145	17 K
-111	650	-129	3.75K	-62	18 K
-28	680	-46	3.9 K	-146	19 K
-112	715	-130	4.1 K	-63	20K
-29	750	-47	4.3K	-147	21K
-113	785	-131	4.5K	-64	22K
-30	820	-48	4.7K	-148	23K
-114	865	-132	4.9K	-65	24K
-31	910	-49	5.1K	-149	25.5K
-115	955	-133	5.35K	-66	27K
-32	1 K	-50	5.6K	-150	28.5K
-116	1.05K	-134	5.9K	-67	30K
-33	1.1 K	-51	6.2K	-151	31.5K
-117	1.15K	-135	6.5K	-68	33K
-34	1.2K	-52	6.8K	-152	34.5K
-118	1.25K	-136	7.15K	-69	36K
-35	1.3 K	-53	7.5K	-153	37.5K
-119	1.4K	-137	7.85K	-70	39K
-36	1.5K	-54	8.2K	-154	41K
-120	1.55K	-138	8.65K	-71	43K
-37	1.6 K	-55	9.1 K	-155	45K
-121	1.7K	-139	9.55K	-72	47K
-38	1.8K	-56	10K	-156	49K
-122	1.9 K	-140	10.5K	-73	51K
-39	2.0K	-57	11 K	-157	53.5K
-123	2.1K	-141	11.5K	-74	56K
-40	2.2K	-58	12 K	-158	59K
-124	2.3K	-142	12.5K	1006750 - 75	62K
-41	2.4K	1006750 - 59	13K		
-125	2.55K				
-42	2.7 K				
1006750 - 126	2.85K				

R6

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 32	1 K	1006750 - 51	6.2 K
-116	1.05K	-135	6.5 K
-33	1.1 K	-52	6.8 K
-117	1.15K	-136	7.15 K
-34	1.2 K	-53	7.5 K
-118	1.25K	-137	7.85K
-35	1.3 K	-54	8.2K
-119	1.4 K	-138	8.65K
-36	1.5K	-55	9.1K
-120	1.55K	-139	9.55K
-37	1.6K	-56	10 K
-121	1.7K	-140	10.5K
-38	1.8K	-57	11 K
-122	1.9K	-141	11.5K
-39	2.0K	-58	12 K
-123	2.1K	-142	12.5K
-40	2.2K	-59	13 K
-124	2.3K	-143	14 K
-41	2.4K	-60	15 K
-125	2.55K	-144	15.5K
-42	2.7K	-61	16K
-126	2.85K	-145	17K
-43	3 K	-62	18K
-127	3.15K	-146	19K
-44	3.3K	-63	20K
-128	3.45K	-147	21K
-45	3.6K	-64	22K
-129	3.75K	-148	23K
-46	3.9K	-65	24K
-130	4.1K	-149	25.5K
-47	4.3K	-66	27K
-131	4.5K	-150	28.5K
-48	4.7K	-67	30K
-132	4.9K	-151	31.5K
-49	5.1K	1006750 - 68	33K
-133	5.35K		
-50	5.6K		
1006750 - 134	5.9K		

R8

DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 25	510	1006750 - 43	3 K
-109	535	-127	3.15 K
-26	560	-44	3.3 K
-110	590	-128	3.45 K
-27	620	-45	3.6 K
-111	650	-129	3.75K
-28	680	-46	3.9 K
-112	715	-130	4.1 K
-29	750	-47	4.3K
-113	785	-131	4.5K
-30	820	-48	4.7K
-114	865	-132	4.9K
-31	910	-49	5.1K
-115	955	-133	5.35K
-32	1K	-50	5.6K
-116	1.05 K	-134	5.9K
-33	1.1 K	-51	6.2K
-117	1.15K	-135	6.5K
-34	1.2K	-52	6.8K
-118	1.25K	-136	7.15K
-35	1.3K	-53	7.5K
-119	1.4K	-137	7.85K
-36	1.5K	-54	8.2K
-120	1.55K	-138	8.65K
-37	1.6 K	-55	9.1 K
-121	1.7K	-139	9.55K
-38	1.8K	-56	10K
-122	1.9K	-140	10.5K
-39	2.0K	-57	11 K
-123	2.1K	-141	11.5K
-40	2.2K	1006750 - 58	12K
-124	2.3K	1006757 - 8	0
-41	2.4K		
-125	2.55K		
-42	2.7K		
1006750 - 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. — SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 2 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	[illegible]	[illegible]
F	REVISED PER TDRR 07062 DR [illegible] CHK [illegible]	12 Mar 64	[illegible]
G	REVISED PER TDRR 08408 DR R.W. DuPont CHK Q.R.B. RB	5/9/64	[illegible]
H	REVISED PER TDRR 12600 DR [illegible] CHK [illegible] RTM	9/23/64	[illegible]

R 31	
DASH NO.	OHMS ±2%
1006750 - 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
- 64	22 K
- 148	23 K
- 65	24 K
- 149	25.5 K
- 66	27 K
- 150	28.5 K
- 67	30 K
- 151	31.5 K
- 68	33 K
- 152	34.5 K
- 69	36 K
- 153	37.5 K
- 70	39 K
- 154	41 K
1006750 - 71	43 K

R 1	
DASH NO.	OHMS ±2%
1006750 - 52	6.8 K
- 136	7.15 K
- 53	7.5 K
- 137	7.85 K
- 54	8.2 K
- 138	8.65 K
- 55	9.1 K
- 139	9.55 K
- 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
1006750 - 64	22 K

R 2			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 56	10 K	1006750 - 157	53.5 K
- 140	10.5 K	- 74	56 K
- 57	11 K	- 158	59 K
- 141	11.5 K	- 75	62 K
- 58	12 K	- 159	65 K
- 142	12.5 K	- 76	68 K
- 59	13 K	- 160	71.5 K
- 143	14 K	- 77	75 K
- 60	15 K	- 161	78.5 K
- 144	15.5 K	- 78	82 K
- 61	16 K	- 162	86.5 K
- 145	17 K	- 79	91 K
- 62	18 K	- 163	95.5 K
- 146	19 K	- 80	100 K
- 63	20 K	- 164	105 K
- 147	21 K	- 81	110 K
- 64	22 K	- 165	115 K
- 148	23 K	- 82	120 K
- 65	24 K	- 166	125 K
- 149	25.5 K	- 83	130 K
- 66	27 K	- 167	140 K
- 150	28.5 K	1006750 - 84	150 K
- 67	30 K		
- 151	31.5 K		
- 68	33 K		
- 152	34.5 K		
- 69	36 K		
- 153	37.5 K		
- 70	39 K		
- 154	41 K		
- 71	43 K		
- 155	45 K		
- 72	47 K		
- 156	49 K		
1006750 - 73	51 K		

RT 2	
DASH NO.	OHMS ±2%
1006712 - 1	5[illegible]
1006712 - 2	1000
1006712 - 3	5000

C 2	
DASH NO.	VALUE UUF
1006793 - 37	10
- 38	11
- 39	12
- 40	13
- 41	15
- 42	16
- 43	18
- 44	20
- 45	22
- 46	24
- 47	27
- 48	30
- 49	33
- 50	36
- 51	39
- 52	43
- 53	47
- 54	51
- 55	56
- 56	62
- 57	68
- 58	75
- 59	82
- 60	91
1006793 - 61	100

R 17	
DASH NO	OHMS ±2%
1006750 - 55	9.1 K
- 56	10 K
- 57	11 K
- 58	12 K
- 59	13 K
1006750 - 60	14 K

Ⓔ THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.F. [illegible] DATE 1/29/64
CHECKED [illegible] 3 Feb 64
APPROVAL
APPROVAL [illegible] 3 Feb. 64
NASA APPROVAL [illegible] 2-17-64
MIT APPROVAL [illegible] 4 Feb 64

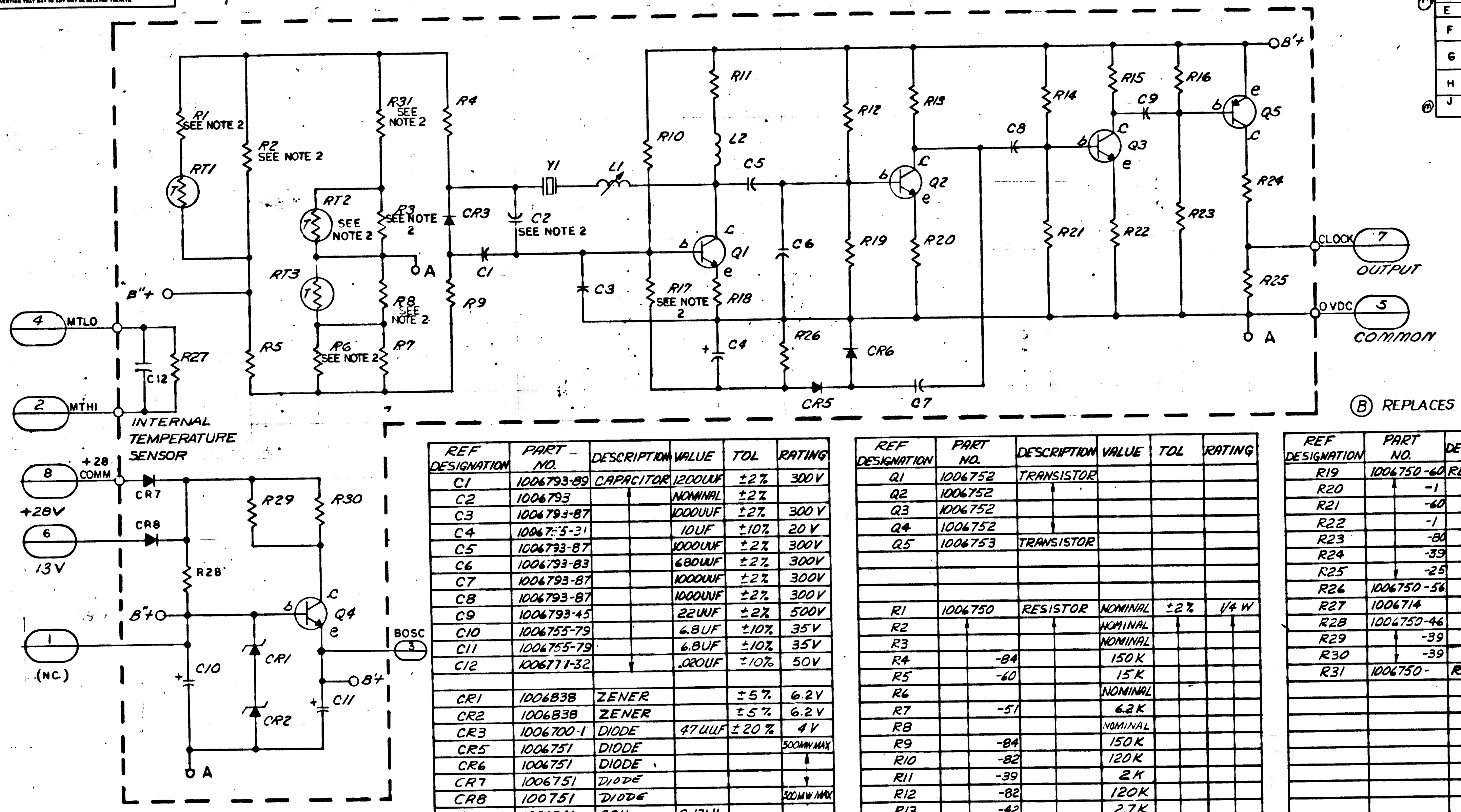
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01F53	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02455	8-26-63	
C	REVISED PER TDRR 03223	9-1963	
D	REVISED PER TDRR 05789	1-21-64	
E	REVISED PER TDRR 05789	1-21-64	
F	REVISED PER TDRR 07062 DR CHK	22 Nov 64	
G	REVISED PER TDRR 08408 DR R.U. CHK A.P.B	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	
J	REVISED PER TDRR 16705 DR CHK APPD	6/2/65	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300 V
C4	10067_5-31		10UF	±10%	20 V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300 V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006771-32		.020UF	±10%	50V
CR1	1006838	ZENER		±5%	6.2V
CR2	1006838	ZENER		±5%	6.2 V
CR3	1006700-1	DIODE	47UUF	±20%	4 V
CR5	1006751	DIODE			500MW MAX
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			500MW MAX
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		
RT3	1006291	THERMISTOR			

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2			NOMINAL		
R3			NOMINAL		
R4	-84		150K		
R5	-60		15K		
R6			NOMINAL		
R7	-51		6.2K		
R8			NOMINAL		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2 K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

REF DRAWINGS: 1003526, 1003818 AGC OSC ASSY

NOTES:

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, & RT2 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN J. A. Zaffino DATE 22 AUG 63
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
Ⓜ E	REDRAWN WITH CHANGES PER TDRR 05789	2 Jan 64	
F	REVISED PER TDRR DR CHK 07062	2 Mar 64	
G	REVISED PER TDRR 08408 DR R.W. DuPont CHK Q.R.B.	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/22/64	
Ⓜ J	REVISED PER TDRR 16705 DR J.P. CHK R.H.E.	6/2/65	

R3					
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 25	510	1006750 - 43	3 K	1006750 - 143	14 K
- 109	535	- 127	3.15K	- 60	15 K
- 26	560	- 44	3.3K	- 144	15.5K
- 110	590	- 128	3.45K	- 61	16 K
- 27	620	- 45	3.6K	- 145	17 K
- 111	650	- 129	3.75K	- 62	18 K
- 28	680	- 46	3.9K	- 146	19 K
- 112	715	- 130	4.1K	- 63	20K
- 29	750	- 47	4.3K	- 147	21K
- 113	785	- 131	4.5K	- 64	22K
- 30	820	- 48	4.7K	- 148	23K
- 114	865	- 132	4.9K	- 65	24K
- 31	910	- 49	5.1K	- 149	25.5K
- 115	955	- 133	5.35K	- 66	27K
- 32	1 K	- 50	5.6K	- 150	28.5K
- 116	1.05K	- 134	5.9K	- 67	30K
- 33	1.1 K	- 51	6.2K	- 151	31.5K
- 117	1.15K	- 135	6.5K	- 68	33K
- 34	1.2K	- 52	6.8K	- 152	34.5K
- 118	1.25K	- 136	7.15K	- 69	36K
- 35	1.3K	- 53	7.5K	- 153	37.5K
- 119	1.4K	- 137	7.85K	- 70	39K
- 36	1.5K	- 54	8.2K	- 154	41K
- 120	1.55K	- 138	8.65K	- 71	43K
- 37	1.6K	- 55	9.1K	- 155	45K
- 121	1.7K	- 139	9.55K	- 72	47K
- 38	1.8K	- 56	10K	- 156	49K
- 122	1.9K	- 140	10.5K	- 73	51K
- 39	2.0K	- 57	11 K	- 157	53.5K
- 123	2.1K	- 141	11.5K	- 74	56K
- 40	2.2K	- 58	12 K	- 158	59K
- 124	2.3K	- 142	12.5K	1006750 - 75	62K
- 41	2.4K	1006750 - 59	13K		
- 125	2.55K				
- 42	2.7K				
1006750 - 126	2.85K				

R6			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 32	1 K	1006750 - 51	6.2 K
- 116	1.05K	- 135	6.5 K
- 33	1.1 K	- 52	6.8 K
- 117	1.15K	- 136	7.15 K
- 34	1.2K	- 53	7.5 K
- 118	1.25K	- 137	7.85K
- 35	1.3 K	- 54	8.2 K
- 119	1.4K	- 138	8.65K
- 36	1.5K	- 55	9.1 K
- 120	1.55K	- 139	9.55K
- 37	1.6K	- 56	10 K
- 121	1.7K	- 140	10.5K
- 38	1.8K	- 57	11 K
- 122	1.9K	- 141	11.5K
- 39	2.0K	- 58	12 K
- 123	2.1K	- 142	12.5K
- 40	2.2K	- 59	13 K
- 124	2.3K	- 143	14 K
- 41	2.4K	- 60	15 K
- 125	2.55K	- 144	15.5K
- 42	2.7 K	- 61	16K
- 126	2.85K	- 145	17 K
- 43	3 K	- 62	18K
- 127	3.15K	- 146	19K
- 44	3.3 K	- 63	20K
- 128	3.45K	- 147	21K
- 45	3.6K	- 64	22K
- 129	3.75K	- 148	23K
- 46	3.9K	- 65	24K
- 130	4.1 K	- 149	25.5K
- 47	4.3 K	- 66	27 K
- 131	4.5 K	- 150	28.5K
- 48	4.7 K	- 67	30K
- 132	4.9K	- 151	31.5K
- 49	5.1 K	1006750 - 68	33 K
- 133	5.35K		
- 50	5.6 K		
1006750 - 134	5.9K		

R8			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 - 25	510	1006750 - 43	3 K
- 109	535	- 127	3.15 K
- 26	560	- 44	3.3 K
- 110	590	- 128	3.45 K
- 27	620	- 45	3.6 K
- 111	650	- 129	3.75K
- 28	680	- 46	3.9 K
- 112	715	- 130	4.1 K
- 29	750	- 47	4.3K
- 113	785	- 131	4.5K
- 30	820	- 48	4.7K
- 114	865	- 132	4.9K
- 31	910	- 49	5.1K
- 115	955	- 133	5.35K
- 32	1 K	- 50	5.6K
- 116	1.05 K	- 134	5.9K
- 33	1.1 K	- 51	6.2K
- 117	1.15K	- 135	6.5K
- 34	1.2K	- 52	6.8K
- 118	1.25K	- 136	7.15K
- 35	1.3K	- 53	7.5K
- 119	1.4 K	- 137	7.85K
- 36	1.5K	- 54	8.2K
- 120	1.55K	- 138	8.65K
- 37	1.6 K	- 55	9.1 K
- 121	1.7K	- 139	9.55K
- 38	1.8K	- 56	10 K
- 122	1.9K	- 140	10.5K
- 39	2.0K	- 57	11 K
- 123	2.1K	- 141	11.5K
- 40	2.2K	1006750 - 58	12K
- 124	2.3K	1006757 - 8	0
- 41	2.4K		
- 125	2.55K		
- 42	2.7K		
1006750 - 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANG'S ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL 4 Feb 64
NASA APPROVAL 2/19/64
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —— SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 2 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	21 Jan 64	
F	REVISED PER TDRR DR CHK 07062	12 Nov 64	
G	REVISED PER TDRR 08408 DR R.W. DuPont CHK Q.R.B.	5/9/64	
H	REVISED PER TDRR 12600 DR CHK RTM	9/23/64	
J	REVISED PER TDRR 16705 DR J.P. Leonard CHK R.M.S.	4/4/65	

R 31	
DASH NO.	OHMS ±2%
1006750 - 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
- 64	22K
- 148	23K
- 65	24 K
- 149	25.5K
- 66	27 K
- 150	28.5K
- 67	30 K
- 151	31.5 K
- 68	33 K
- 152	34.5 K
- 69	36 K
- 153	37.5 K
- 70	39 K
- 154	41 K
1006750 - 71	43K

R 1	
DASH NO.	OHMS ±2%
1006750 - 52	6.8 K
- 136	7.15 K
- 53	7.5 K
- 137	7.85 K
- 54	8.2 K
- 138	8.65K
- 55	9.1 K
- 139	9.55K
- 56	10 K
- 140	10.5K
- 57	11 K
- 141	11.5K
- 58	12 K
- 142	12.5K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20K
- 147	21 K
1006750 - 64	22K

R 2			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 56	10 K	1006750 - 157	53.5 K
- 140	10.5K	- 74	56 K
- 57	11 K	- 158	59 K
- 141	11.5 K	- 75	62 K
- 58	12 K	- 159	65 K
- 142	12.5 K	- 76	68 K
- 59	13 K	- 160	71.5 K
- 143	14 K	- 77	75 K
- 60	15 K	- 161	78.5 K
- 144	15.5K	- 78	82K
- 61	16 K	- 162	86.5K
- 145	17 K	- 79	91 K
- 62	18 K	- 163	95.5K
- 146	19 K	- 80	100K
- 63	20 K	- 164	105K
- 147	21 K	- 81	110K
- 64	22K	- 165	115K
- 148	23K	- 82	120K
- 65	24K	- 166	125K
- 149	25.5K	- 83	130K
- 66	27K	- 167	140K
- 150	28.5K	1006750 - 84	150K
- 67	30 K		
- 151	31.5 K		
- 68	33 K		
- 152	34.5 K		
- 69	36 K		
- 153	37.5 K		
- 70	39 K		
- 154	41 K		
- 71	43 K		
- 155	45 K		
- 72	47 K		
- 156	49 K		
1006750 - 73	51 K		

RT 2	
DASH NO.	OHMS ±2%
1006712 - 1	500
1006712 - 2	1000
1006712 - 3	5000

C 2	
DASH NO.	VALUE UUF
1006793 - 37	10
- 38	11
- 39	12
- 40	13
- 41	15
- 42	16
- 43	18
- 44	20
- 45	22
- 46	24
- 47	27
- 48	30
- 49	33
- 50	36
- 51	39
- 52	43
- 53	47
- 54	51
- 55	56
- 56	62
- 57	68
- 58	75
- 59	82
- 60	91
1006793 - 61	100

R 17	
DASH NO	OHMS ±2%
1006750 - 55	9.1 K
- 56	10 K
- 57	11 K
- 58	12 K
- 59	13 K
1006750 - 60	14 K

Ⓔ THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.F. Nichols DATE 1/29/64
CHECKED
APPROVAL
APPROVAL 5 Feb 64
NASA APPROVAL 2/17/64
MIT APPROVAL 4 Feb 64

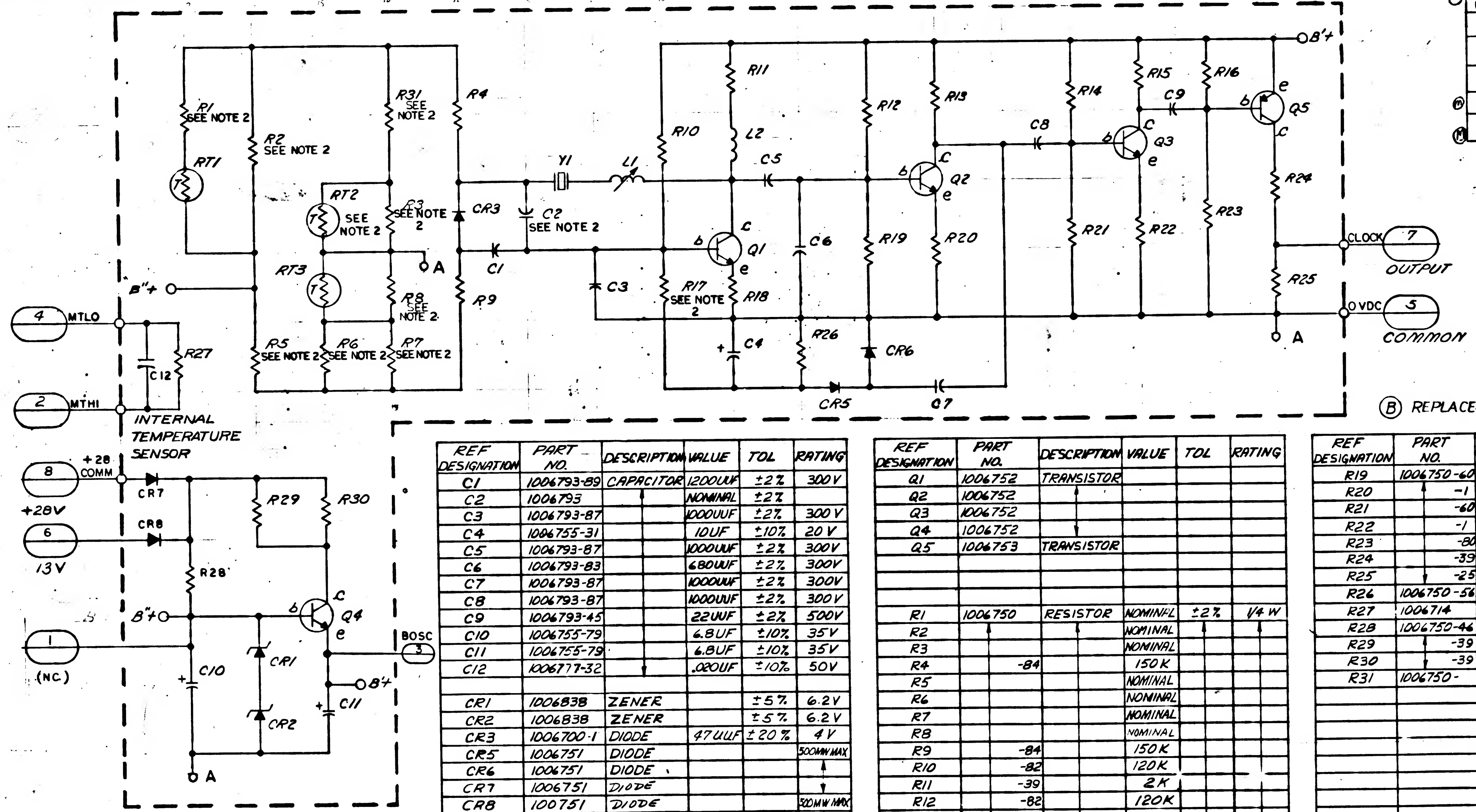
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01853	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 01853	8-26-63	
C	REVISED PER TDRR 03223	9-12-63	
D	REVISED PER TDRR 05789	1-21-64	
E	REVISED PER TDRR 05789	1-21-64	
F	REVISED PER TDRR 07062 DR CHK	12 Mar 64	
G	REVISED PER TDRR 08408 DR CHK A.P.B	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	
J	REVISED PER TDRR 16705 DR CHK APPD	6/2/65	
K	REVISED PER TDRR 19999 DR J.P. CHK R.M.E.	6/18/65	



Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793		NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300V
C4	1006755-31		10UF	±10%	20V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32		.020UF	±10%	50V
CR1	1006838	ZENER		±5%	6.2V
CR2	1006838	ZENER		±5%	6.2V
CR3	1006700-1	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			500MW MAX
CR6	1006751	DIODE			
CR7	1006751	DIODE			
CR8	100751	DIODE			500MW MAX
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		
RT3	1006291	THERMISTOR			

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2			NOMINAL		
R3			NOMINAL		
R4	-84		150K		
R5			NOMINAL		
R6			NOMINAL		
R7			NOMINAL		
R8			NOMINAL		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2K		
R16	-72		47K		
R17			NOMINAL		
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	-1		51		
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	-25		510		
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	-39		2K		
R30	-39		2K		
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

REF DRAWINGS: 1003526, 1003818 AGC OSC ASSY

NOTES:

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, RT2, R5 & R7 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN J.A. Zaffini DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL
NASA APPROVAL Jack Bernard
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. 80230
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789	21 Jan 64	
F	REVISED PER TDRR DR CHK 07062	2 Mar 64	
G	REVISED PER TDRR 08408 DR CHK Q.R.B.	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	
J	REVISED PER TDRR 16705 DR J.P. Leonard CHK R.W.E.	4/6/65	
K	REVISED PER TDRR 19999 DR J.P. Leonard CHK R.W.E.	6/18/65	

R3 & R7					
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 – 25	510	1006750 – 43	3 K	1006750 – 143	14 K
↑ – 109	535	↑ – 127	3.15K	↑ – 60	15 K
– 26	560	– 44	3.3K	– 144	15.5K
– 110	590	– 128	3.45K	– 61	16 K
– 27	620	– 45	3.6K	– 145	17 K
– 111	650	– 129	3.75K	– 62	18 K
– 28	680	– 46	3.9K	– 146	19 K
– 112	715	– 130	4.1K	– 63	20K
– 29	750	– 47	4.3K	– 147	21K
– 113	785	– 131	4.5K	– 64	22K
– 30	820	– 48	4.7K	– 148	23K
– 114	865	– 132	4.9K	– 65	24K
– 31	910	– 49	5.1K	– 149	25.5K
– 115	955	– 133	5.35K	– 66	27K
– 32	1 K	– 50	5.6K	– 150	28.5K
– 116	1.05K	– 134	5.9K	– 67	30K
– 33	1.1 K	– 51	6.2K	– 151	31.5K
– 117	1.15K	– 135	6.5K	– 68	33K
– 34	1.2K	– 52	6.8K	– 152	34.5K
– 118	1.25K	– 136	7.15K	– 69	36K
– 35	1.3 K	– 53	7.5K	– 153	37.5K
– 119	1.4K	– 137	7.85K	– 70	39K
– 36	1.5K	– 54	8.2K	– 154	41K
– 120	1.55K	– 138	8.65K	– 71	43K
– 37	1.6 K	– 55	9.1 K	– 155	45K
– 121	1.7K	– 139	9.55K	– 72	47K
– 38	1.8K	– 56	10K	– 156	49K
– 122	1.9 K	– 140	10.5K	– 73	51K
– 39	2.0K	– 57	11 K	– 157	53.5K
– 123	2.1K	– 141	11.5K	– 74	56K
– 40	2.2K	– 58	12 K	↓ – 158	59K
– 124	2.3K	↓ – 142	12.5K	1006750 – 75	62K
– 41	2.4K	1006750 – 59	13K		
– 125	2.55K				
↓ – 42	2.7 K				
1006750 – 126	2.85K				

R6 & R5			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 – 32	1 K	1006750 – 51	6.2 K
↑ – 116	1.05K	↑ – 135	6.5 K
– 33	1.1 K	– 52	6.8 K
– 117	1.15K	– 136	7.15 K
– 34	1.2K	– 53	7.5 K
– 118	1.25K	– 137	7.85K
– 35	1.3 K	– 54	6.2 K
– 119	1.4K	– 138	8.65K
– 36	1.5K	– 55	9.1 K
– 120	1.55K	– 139	9.55K
– 37	1.6K	– 56	10 K
– 121	1.7K	– 140	10.5K
– 38	1.8K	– 57	11 K
– 122	1.9K	– 141	11.5K
– 39	2.0K	– 58	12 K
– 123	2.1K	– 142	12.5K
– 40	2.2K	– 59	13 K
– 124	2.3K	– 143	14 K
– 41	2.4K	– 60	15 K
– 125	2.55K	– 144	15.5K
– 42	2.7K	– 61	16K
– 126	2.85K	– 145	17 K
– 43	3 K	– 62	18K
– 127	3.15K	– 146	19K
– 44	3.3K	– 63	20K
– 128	3.45K	– 147	21K
– 45	3.6K	– 64	22K
– 129	3.75K	– 148	23K
– 46	3.9K	– 65	24K
– 130	4.1 K	– 149	25.5K
– 47	4.3K	– 66	27K
– 131	4.5K	– 150	28.5K
– 48	4.7K	– 67	30K
– 132	4.9K	↓ – 151	31.5K
– 49	5.1K	1006750 – 68	33K
– 133	5.35K		
↓ – 50	5.6K		
1006750 – 134	5.9K		

R8			
DASH NO.	OHMS ± 2%	DASH NO.	OHMS ± 2%
1006750 – 25	510	1006750 – 43	3 K
↑ – 109	535	↑ – 127	3.15 K
– 26	560	– 44	3.3 K
– 110	590	– 128	3.45 K
– 27	620	– 45	3.6 K
– 111	650	– 129	3.75K
– 28	680	– 46	3.9 K
– 112	715	– 130	4.1 K
– 29	750	– 47	4.3K
– 113	785	– 131	4.5K
– 30	820	– 48	4.7K
– 114	865	– 132	4.9K
– 31	910	– 49	5.1K
– 115	955	– 133	5.35K
– 32	1 K	– 50	5.6K
– 116	1.05 K	– 134	5.9K
– 33	1.1 K	– 51	6.2K
– 117	1.15 K	– 135	6.5K
– 34	1.2K	– 52	6.8K
– 118	1.25K	– 136	7.15K
– 35	1.3K	– 53	7.5K
– 119	1.4 K	– 137	7.85K
– 36	1.5K	– 54	8.2K
– 120	1.55K	– 138	8.65K
– 37	1.6 K	– 55	9.1 K
– 121	1.7K	– 139	9.55K
– 38	1.8K	– 56	10 K
– 122	1.9K	– 140	10.5K
– 39	2.0K	– 57	11 K
– 123	2.1K	↓ – 141	11.5K
– 40	2.2K	1006750 – 58	12 K
– 124	2.3K	1006757 – 8	0
– 41	2.4K		
– 125	2.55K		
↓ – 42	2.7K		
1006750 – 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS.
DWG NO.
CONTRACT
DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. 80230
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 2 OF 3

1006140 K

NOTICE – WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	21 Jan 64	[illegible]
F	REVISED PER TDRR DR [illegible] CHK [illegible] 07062	12 Mar 64	[illegible]
G	REVISED PER TDRR 08408 DR R.W. DuPont Jr CHK G.R.B. RE	5/9/64	[illegible]
H	REVISED PER TDRR 12600 DR [illegible] CHK [illegible] RTM	9/23/64	[illegible]
J	REVISED PER TDRR 16705 DR J.P. Leonard CHK P.W.E.	[illegible]	[illegible]
K	REVISED PER TDRR 9999 DR J.P. Leonard CHK P.W.E.	4/12/65	[illegible]

R 31	
DASH NO.	OHMS ±2%
1006750 - 56	10 K
- 140	10.5 K
- 57	11 K
- 141	11.5 K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20 K
- 147	21 K
- 64	22K
- 148	23K
- 65	24 K
- 149	25.5K
- 66	27 K
- 150	28.5K
- 67	30 K
- 151	31.5 K
- 68	33 K
- 152	34.5 K
- 69	36 K
- 153	37.5 K
- 70	39 K
- 154	41 K
1006750 - 71	43K

R 1	
DASH NO.	OHMS ±2%
1006750 - 52	6.8 K
- 136	7.15 K
- 53	7.5 K
- 137	7.85 K
- 54	8.2 K
- 138	8.65K
- 55	9.1 K
- 139	9.55 K
- 56	10 K
- 140	10.5K
- 57	11 K
- 141	11.5K
- 58	12 K
- 142	12.5 K
- 59	13 K
- 143	14 K
- 60	15 K
- 144	15.5 K
- 61	16 K
- 145	17 K
- 62	18 K
- 146	19 K
- 63	20K
- 147	21 K
1006750 - 64	22K

R 2			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 - 56	10 K	1006750 - 157	53.5 K
- 140	10.5K	- 74	56 K
- 57	11 K	- 158	59 K
- 141	11.5 K	- 75	62 K
- 58	12 K	- 159	65 K
- 142	12.5 K	- 76	68 K
- 59	13 K	- 160	71.5 K
- 143	14 K	- 77	75 K
- 60	15 K	- 161	78.5 K
- 144	15.5K	- 78	82K
- 61	16 K	- 162	86.5K
- 145	17 K	- 79	91 K
- 62	18 K	- 163	95.5K
- 146	19 K	- 80	100K
- 63	20K	- 164	105K
- 147	21K	- 81	110K
- 64	22K	- 165	115 K
- 148	23K	- 82	120K
- 65	24K	- 166	125K
- 149	25.5K	- 83	130K
- 66	27K	- 167	140K
- 150	28.5K	1006750 - 84	150K
- 67	30 K		
- 151	31.5 K		
- 68	33 K		
- 152	34.5K		
- 69	36 K		
- 153	37.5K		
- 70	39 K		
- 154	41 K		
- 71	43 K		
- 155	45 K		
- 72	47 K		
- 156	49 K		
1006750 - 73	51 K		

RT 2	
DASH NO.	OHMS ±2%
1006712 - 1	500
1006712 - 2	1000
1006712 - 3	5000

R 17	
DASH NO	OHMS ±2%
1006750 - 55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13 K
1006750 -60	14 K

C 2	
DASH NO.	VALUE UUF
1006793 -37	10
-38	11
-39	12
-40	13
-41	15
-42	16
-43	18
-44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793 -61	100

Ⓔ THIS SHEET ADDED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN A.E. [illegible] DATE 1/21/64
CHECKED [illegible]
APPROVAL
APPROVAL [illegible]
NASA APPROVAL [illegible]
MIT APPROVAL [illegible]

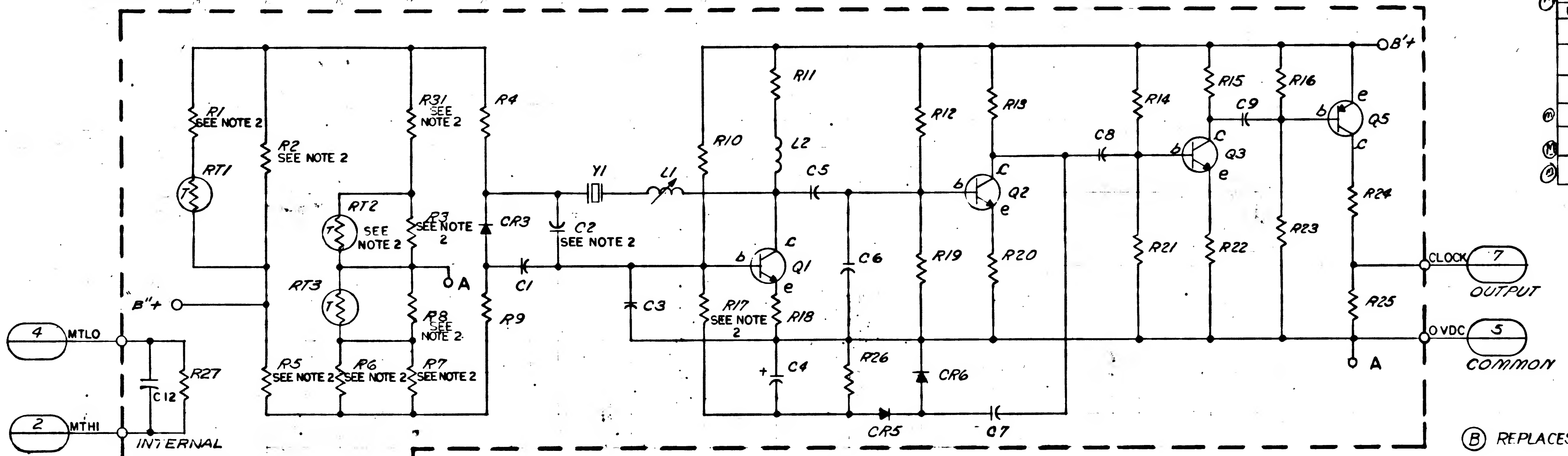
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

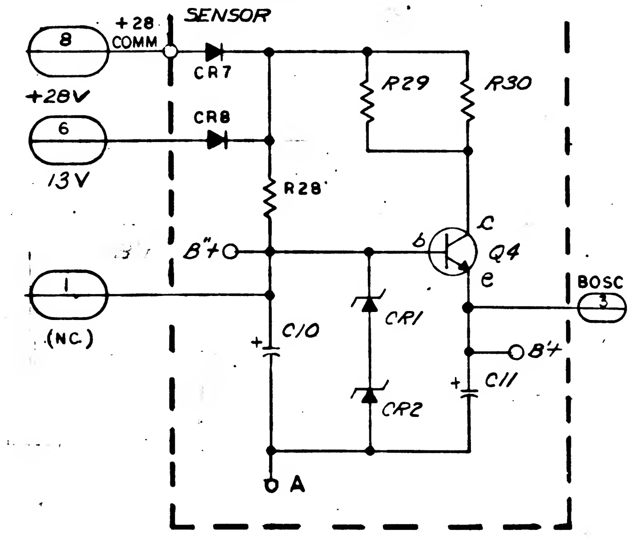
SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. 80230
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION 01853	DATE	APPROVAL
B	REV AND REDRAWN / TDRR 02455	8-26-63	
C	REVISED PER TDRR 03223	9-12-63	WH
D	REVISED PER TDRR 05789	1-21-64	
E	REVISED PER TDRR 05789	1-21-64	
F	REVISED PER TDRR 07062 DR CHK	12 Mar 64	
G	REVISED PER TDRR 08408 DR R.W. DuPont CHK A.P.B	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	
J	REVISED PER TDRR 16705 DR CHK APPD	6/2/65	
K	REVISED PER TDRR 19999 DR CHK R.M.E. 03	6/18/65	
L	REVISED PER TDRR 21339 DR CHK 04	8/4/65	





Ⓑ REPLACES REV A WITH CHANGES

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-89	CAPACITOR	1200UUF	±2%	300V
C2	1006793	↑	NOMINAL	±2%	
C3	1006793-87		1000UUF	±2%	300V
C4	1006755-31		10UF	±10%	20V
C5	1006793-87		1000UUF	±2%	300V
C6	1006793-83		680UUF	±2%	300V
C7	1006793-87		1000UUF	±2%	300V
C8	1006793-87		1000UUF	±2%	300V
C9	1006793-45		22UUF	±2%	500V
C10	1006755-79		6.8UF	±10%	35V
C11	1006755-79		6.8UF	±10%	35V
C12	1006777-32	↓	.020UF	±10%	50V
CR1	1006838	ZENER		±5%	6.2V
CR2	1006838	ZENER		±5%	6.2V
CR3	1006700-1	DIODE	47UUF	±20%	4V
CR5	1006751	DIODE			500MW MAX
CR6	1006751	DIODE			↑
CR7	1006751	DIODE			↓
CR8	100751	DIODE			500MW MAX
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22Uh	±10%	
Y1	1006847	XTAL			
RT1	1006715-1	THERMISTOR			
RT2	1006712	THERMISTOR	NOMINAL		
RT3	1006291	THERMISTOR			

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752	↑			
Q3	1006752				
Q4	1006752	↓			
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL	±2%	1/4 W
R2	↑	↑	NOMINAL	↑	↑
R3			NOMINAL		
R4	-84		150K		
R5			NOMINAL		
R6			NOMINAL		
R7			NOMINAL		
R8			NOMINAL		
R9	-84		150K		
R10	-82		120K		
R11	-39		2K		
R12	-82		120K		
R13	-42		2.7K		
R14	-74		56K		
R15	-39		2K		
R16	-72		47K		
R17	↓	↓	NOMINAL	↓	↓
R18	1006750-8	RESISTOR	100	±2%	1/4 W

REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
R19	1006750-60	RESISTOR	15K	±2%	1/4 W
R20	↑ -1	↑	51	↑	↑
R21	-60		15K		
R22	-1		51		
R23	-80		100K		
R24	-39		2K		
R25	↓ -25		510	↓	↓
R26	1006750-56		10K	±2%	1/4 W
R27	1006714				
R28	1006750-46		3.9K	±2%	1/4 W
R29	↑ -39		2K	↑	↑
R30	↓ -39	↓	2K	↓	↓
R31	1006750-	RESISTOR	NOMINAL	±2%	1/4 W

REF DRAWINGS: 1003526, 1003818 AGC OSC ASSY

NOTES:

1. RESISTOR VALUES ARE EXPRESSED IN OHMS UNLESS OTHERWISE SPECIFIED
2. THE VALUE OF THE FOLLOWING COMPONENTS TO BE DETERMINED AT UNIT TEST: C2, R1, R2, R3, R6, R8, R17, R31, RT2, R5 & R7 SEE TABLE ON SHEET 2
3. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN DATE 22 AUG 63
CHECKED 23 Aug 63
APPROVAL
APPROVAL 27 Aug 63
NASA APPROVAL
MIT APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. 80230
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 3

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	REDRAWN WITH CHANGES PER TDRR 05789	2 Jan 64	
F	REVISED PER TDRR DR CHK 07062	2 Mar 64	
G	REVISED PER TDRR 08408 DR R. W. DuPont CHK Q.R.B.	5/7/64	
H	REVISED PER TDRR 12600 DR CHK	9/23/64	
J	REVISED PER TDRR 16705 DR J.P. Leonard CHK R.W.E.	4/2/65	
K	REVISED PER TDRR 19999 DR J.P. Leonard CHK R.W.E.	6/18/65	
L	REVISED PER TDRR 21339 DR CHK	9/16/65	

R1, R2, R3, R5, R6, R7, R8, R31					
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 – 25	510	1006750 – 43	3 K	1006750 – 143	14 K
– 109	535	– 127	3.15K	– 60	15 K
– 26	560	– 44	3.3K	– 144	15.5K
– 110	590	– 128	3.45K	– 61	16 K
– 27	620	– 45	3.6 K	– 145	17 K
– 111	650	– 129	3.75K	– 62	18 K
– 28	680	– 46	3.9 K	– 146	19 K
– 112	715	– 130	4.1 K	– 63	20K
– 29	750	– 47	4.3K	– 147	21K
– 13	785	– 131	4.5K	– 64	22K
– 30	820	– 48	4.7K	– 148	23K
– 114	865	– 132	4.9K	– 65	24K
– 31	910	– 49	5.1K	– 149	25.5K
– 115	955	– 133	5.35K	– 66	27K
– 32	1 K	– 50	5.6K	– 150	28.5K
– 116	1.05K	– 134	5.9K	– 67	30K
– 33	1.1 K	– 51	6.2K	– 151	31.5K
– 117	1.15K	– 135	6.5K	– 68	33K
– 34	1.2K	– 52	6.8K	– 152	34.5K
– 118	1.25K	– 136	7.15K	– 69	36K
– 35	1.3 K	– 53	7.5K	– 153	37.5K
– 119	1.4K	– 137	7.85K	– 70	39K
– 36	1.5K	– 54	8.2K	– 154	41K
– 120	1.55K	– 138	8.65K	– 71	43K
– 37	1.6 K	– 55	9.1 K	– 155	45K
– 121	1.7K	– 139	9.55K	– 72	47K
– 38	1.8K	– 56	10K	– 156	49K
– 122	1.9 K	– 140	10.5K	– 73	51K
– 39	2.0K	– 57	11 K	– 157	53.5K
– 123	2.1K	– 141	11.5K	– 74	56K
– 40	2.2K	– 58	12 K	– 158	59K
– 124	2.3K	– 142	12.5K	– 75	62K
– 41	2.4K	1006750 – 59	13K	– 159	65K
– 125	2.55K			– 76	68K
– 42	2.7 K			– 160	71.5K
1006750 – 126	2.85K			– 77	75K
				– 161	78.5K
				– 78	82K
				– 162	86.5K
				– 79	91K
				– 163	95.5K
				– 80	100K
				– 164	105K
				– 81	110K
				– 165	115K
				– 82	120K
				– 166	125K
				– 83	130K
				– 174	135K
				– 167	140K
				– 175	145K
				– 84	150K
				– 170	1.35K
				– 171	1.45K
				– 172	13.5K
				1006750 – 173	14.5K

R6&R5			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 – 32	1 K	1006750 – 51	6.2 K
– 116	1.05K	– 135	6.5 K
– 33	1.1 K	– 52	6.8 K
– 117	1.15K	– 136	7.15 K
– 34	1.2 K	– 53	7.5 K
– 118	1.25K	– 137	7.85K
– 35	1.3 K	– 54	8.2K
– 119	1.4 K	– 138	8.65K
– 36	1.5K	– 55	9.1K
– 120	1.55K	– 139	9.55K
– 37	1.6 K	– 56	10 K
– 121	1.7K	– 140	10.5K
– 38	1.8K	– 57	11 K
– 122	1.9K	– 141	11.5K
– 39	2.0K	– 58	12 K
– 123	2.1K	– 142	12.5K
– 40	2.2K	– 59	13 K
– 124	2.3K	– 143	14 K
– 41	2.4K	– 60	15 K
– 125	2.55K	– 144	15.5K
– 42	2.7 K	– 61	16 K
– 126	2.85K	– 145	17 K
– 43	3 K	– 62	18K
– 127	3.15K	– 146	19 K
– 44	3.3 K	– 63	20K
– 128	3.45K	– 147	21K
– 45	3.6K	– 64	22K
– 129	3.75K	– 148	23K
– 46	3.9K	– 65	24K
– 130	4.1 K	– 149	25.5K
– 47	4.3 K	– 66	27 K
– 131	4.5K	– 150	28.5K
– 48	4.7 K	– 67	30K
– 132	4.9K	– 151	31.5K
– 49	5.1 K	1006750 – 68	33 K
– 133	5.35K		
– 50	5.6K		
1006750 – 134	5.9K		

R 8			
DASH NO.	OHMS ±2%	DASH NO.	OHMS ±2%
1006750 – 25	510	1006750 – 43	3 K
– 109	535	– 127	3.15 K
– 26	560	– 44	3.3 K
– 110	590	– 128	3.45 K
– 27	620	– 45	3.6 K
– 111	650	– 129	3.75K
– 28	680	– 46	3.9 K
– 112	715	– 130	4.1 K
– 29	750	– 47	4.4K
– 113	785	– 131	4.5K
– 30	820	– 48	4.7K
– 114	865	– 132	4.9K
– 31	910	– 49	5.1K
– 115	955	– 133	5.35K
– 32	1K	– 50	5.6K
– 116	1.05 K	– 134	5.9K
– 33	1.1 K	– 51	6.2K
– 117	1.15K	– 135	6.5K
– 34	1.2K	– 52	6.8K
– 118	1.25K	– 136	7.15K
– 35	1.3K	– 53	7.5K
– 119	1.4 K	– 137	7.85K
– 36	1.5K	– 54	8.2K
– 120	1.55K	– 138	8.65K
– 37	1.6 K	– 55	9.1 K
– 121	1.7K	– 139	9.55K
– 38	1.8K	– 56	10 K
– 122	1.9K	– 140	10.5K
– 39	2.0K	– 57	11 K
– 123	2.1K	– 141	11.5K
– 40	2.2K	1006750 – 58	12K
– 124	2.3K	1006757 – 8	0
– 41	2.4K		
– 125	2.55K		
– 42	2.7K		
1006750 – 126	2.85K		

Ⓔ REPLACES REV D WITH CHANGES

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING

MATERIAL

HEAT TREATMENT

FINAL FINISH

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT

DRAWN J.F. Walsh DATE 1/27/64
CHECKED
APPROVAL
APPROVAL
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
AGC CLOCK OSC
MODULE B6

CODE IDENT NO. 80230 SIZE D NASA DRAWING NO. 1006140
SCALE NONE WT SHEET 2 OF 3

1006140

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

~~R 31~~	
~~DASH NO.~~	~~OHMS ±2%~~
~~1006750-56~~	~~10 K~~
~~-140~~	~~10.5 K~~
~~-57~~	~~11 K~~
~~-141~~	~~11.5 K~~
~~-58~~	~~12 K~~
~~-142~~	~~12.5 K~~
~~-59~~	~~13 K~~
~~-143~~	~~14 K~~
~~-60~~	~~15 K~~
~~-144~~	~~15.5 K~~
~~-61~~	~~16 K~~
~~-145~~	~~17 K~~
~~-62~~	~~18 K~~
~~-146~~	~~19 K~~
~~-63~~	~~20 K~~
~~-147~~	~~21 K~~
~~-64~~	~~22 K~~
~~-148~~	~~23 K~~
~~-65~~	~~24 K~~
~~-149~~	~~25.5 K~~
~~-66~~	~~27 K~~
~~-150~~	~~28.5 K~~
~~-67~~	~~30 K~~
~~-151~~	~~31.5 K~~
~~-68~~	~~33 K~~
~~-152~~	~~34.5 K~~
~~-69~~	~~36 K~~
~~-153~~	~~37.5 K~~
~~-70~~	~~39 K~~
~~-154~~	~~41 K~~
~~1006750 - 71~~	~~43 K~~

~~R 1~~	
~~DASH NO.~~	~~OHMS ±2%~~
~~1006750-52~~	~~6.8 K~~
~~-136~~	~~7.15 K~~
~~-53~~	~~7.5 K~~
~~-137~~	~~7.85 K~~
~~-54~~	~~8.2 K~~
~~-138~~	~~8.65 K~~
~~-55~~	~~9.1 K~~
~~-139~~	~~9.55 K~~
~~-56~~	~~10 K~~
~~-140~~	~~10.5 K~~
~~-57~~	~~11 K~~
~~-141~~	~~11.5 K~~
~~-58~~	~~12 K~~
~~-142~~	~~12.5 K~~
~~-59~~	~~13 K~~
~~-143~~	~~14 K~~
~~-60~~	~~15 K~~
~~-144~~	~~15.5 K~~
~~-61~~	~~16 K~~
~~-145~~	~~17 K~~
~~-62~~	~~18 K~~
~~-146~~	~~19 K~~
~~-63~~	~~20 K~~
~~-147~~	~~21 K~~
~~1006750 - 64~~	~~22 K~~

~~R 2~~			
~~DASH NO.~~	~~OHMS ±2%~~	~~DASH NO.~~	~~OHMS ±2%~~
~~1006750 - 56~~	~~10 K~~	~~1006750 - 157~~	~~53.5 K~~
~~- 140~~	~~10.5 K~~	~~- 74~~	~~56 K~~
~~- 57~~	~~11 K~~	~~- 158~~	~~59 K~~
~~- 141~~	~~11.5 K~~	~~- 75~~	~~62 K~~
~~- 58~~	~~12 K~~	~~- 159~~	~~65 K~~
~~- 142~~	~~12.5 K~~	~~- 76~~	~~68 K~~
~~- 59~~	~~13 K~~	~~- 160~~	~~71.5 K~~
~~- 143~~	~~14 K~~	~~- 77~~	~~75 K~~
~~- 60~~	~~15 K~~	~~- 161~~	~~78.5 K~~
~~- 144~~	~~15.5 K~~	~~- 78~~	~~82 K~~
~~- 61~~	~~16 K~~	~~- 162~~	~~80.5 K~~
~~- 145~~	~~17 K~~	~~- 79~~	~~91 K~~
~~- 62~~	~~18 K~~	~~- 163~~	~~95.5 K~~
~~- 146~~	~~19 K~~	~~- 80~~	~~100 K~~
~~- 63~~	~~20 K~~	~~- 164~~	~~105 K~~
~~- 147~~	~~21 K~~	~~- 81~~	~~110 K~~
~~- 64~~	~~22 K~~	~~- 165~~	~~115 K~~
~~- 148~~	~~23 K~~	~~- 82~~	~~120 K~~
~~- 65~~	~~24 K~~	~~- 166~~	~~125 K~~
~~- 149~~	~~25.5 K~~	~~- 83~~	~~130 K~~
~~- 66~~	~~27 K~~	~~- 167~~	~~140 K~~
~~- 150~~	~~28.5 K~~	~~1006750 - 84~~	~~150 K~~
~~- 67~~	~~30 K~~		
~~- 151~~	~~31.5 K~~		
~~- 68~~	~~33 K~~		
~~- 152~~	~~34.5 K~~		
~~- 69~~	~~36 K~~		
~~- 153~~	~~37.5 K~~		
~~- 70~~	~~39 K~~		
~~- 154~~	~~41 K~~		
~~- 71~~	~~43 K~~		
~~- 155~~	~~45 K~~		
~~- 72~~	~~47 K~~		
~~- 156~~	~~49 K~~		
~~1006750 - 73~~	~~51 K~~		

RT 2	
DASH NO.	OHMS ±2%
1006712 - 1	500
1006712 - 2	1000
1006712 - 3	5000

R 17	
DASH NO	OHMS ±2%
1006750 - 55	9.1 K
-56	10 K
-57	11 K
-58	12 K
-59	13 K
1006750 -60	15 K

C 2	
DASH NO.	VALUE UUF
1006793 -37	10
-38	11
-39	12
-40	13
-41	15
-42	16
-43	18
-44	20
-45	22
-46	24
-47	27
-48	30
-49	33
-50	36
-51	39
-52	43
-53	47
-54	51
-55	56
-56	62
-57	68
-58	75
-59	82
-60	91
1006793 -61	100

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
E	THIS SHEET ADDED PER TDRR 05789	21 Jan 64	
F	REVISED PER TDRR 07062 DR CHK	12 Mar 64	
G	REVISED PER TDRR 08408 DR R.W. DuPont Jr CHK G.R.B.	5/9/64	
H	REVISED PER TDRR 12600 DR CHK RTM	9/23/64	
J	REVISED PER TDRR 16705 DR J.P. Leonard CHK R.M.S.		
K	REVISED PER TDRR 9999 DR J.P. Leonard CHK R.A.E.	6/18/65	
L	REVISED PER TDRR 21339 DR T. Dumal CHK		

Ⓔ THIS SHEET ADDED

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT
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CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN F. Walsh DATE 1/29/64
CHECKED
APPROVAL
APPROVAL E. S. Duggan 5 Feb 64
NASA APPROVAL 2/17/64
MIT APPROVAL 4 Feb 64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC AGC CLOCK OSC MODULE B6

CODE IDENT NO. 80230
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 3 OF 3

1006140

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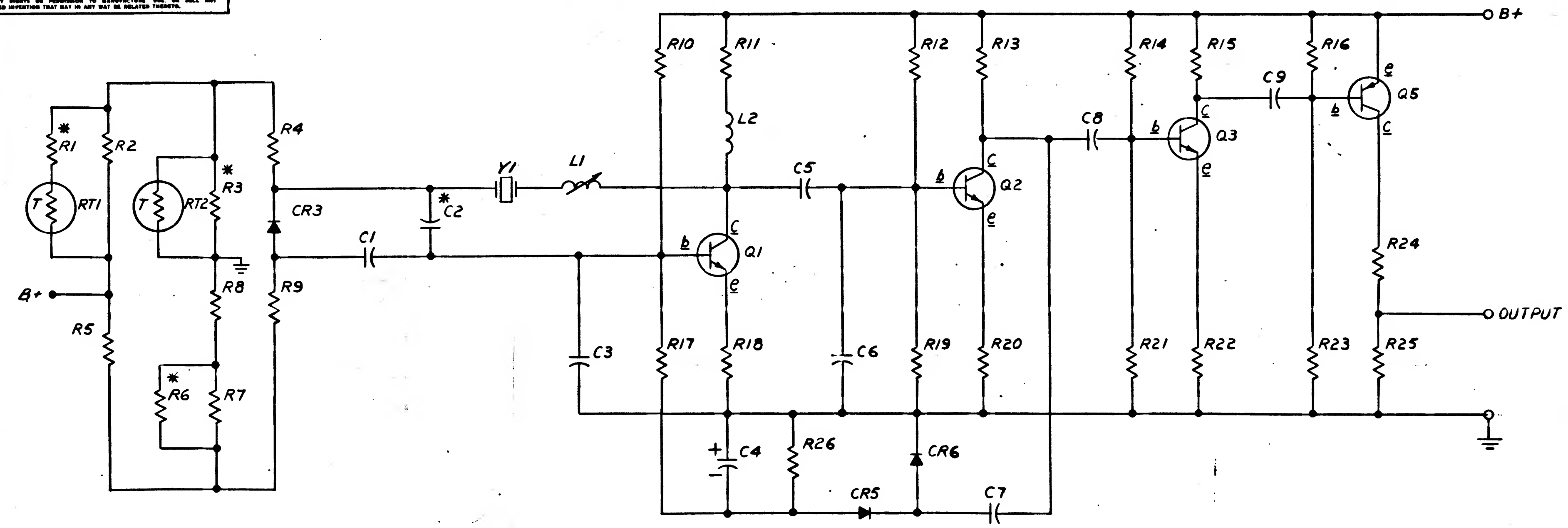
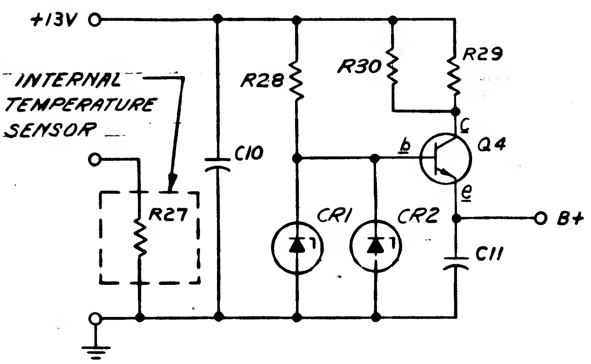
REVISIONS

SYM	DESCRIPTION	DATE	APPROVED
—	CLASS B RELEASE PER TDRR 01853	[illegible]	[illegible]





NOTES:
1.

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
C1	1006793-7	CAPACITOR	1000 UUF		
C2	1006793		NOMINAL		
C3	1006793-7		1000 UUF		
C4	1006755-31		10 UF		
C5	1006793-7		1000 UUF		
C6	1006793-3		680 UUF		
C7	1006793		.001 UF		
C8	1006793		.001 UF		
C9	1006793		22UUF		
C10	1006755-79		6.8UF		35V
C11	1006755-79	CAPACITOR	6.8UF		35V
CR1	1006704	ZENER			
CR2	1006704	ZENER			
CR3	1006700	DIODE	PS1947		
CR5	1006751	DIODE			
CR6	1006751	DIODE			
L1	1006846	COIL	8-13Uh		
L2	1010406-12	COIL	22 Uh		
Y1	1006847	XTAL	HC-27/U		
RT1		THERMISTOR	100K		
RT2		THERMISTOR	4K		

REF DRAWING
MECHANICAL ASSEMBLY

FOR INFORMATION ONLY
CLASS B RELEASE TDRR No 01853 DATE 7/2/63

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING
Q1	1006752	TRANSISTOR			
Q2	1006752				
Q3	1006752				
Q4	1006752				
Q5	1006753	TRANSISTOR			
R1	1006750	RESISTOR	NOMINAL		
R2	1006750-		TBS		
R3	1006750		NOMINAL		
R4	1006750-		TBS		
R5	1006750-		TBS		
R6	1006750		NOMINAL		
R7	1006750-		TBS		
R8	1006750-		TBS		
R9	1006750-		TBS		
R10	1006750-82		120K		
R11	1006750-8		100Ω		
R12	1006750-74		56K		
R13	1006750-42		2.7K		
R14	1006750-74		56K		
R15	1006750-40		2.2K		
R16	1006750-72		47K		
R17	1006750-		TBS		
R18	1006750-8		100Ω		
R19	1006750-60		15K		
R20	1006750-8		100Ω		
R21	1006750-60		15K		
R22	1006750-1		51Ω		
R23	1006750-80		100K		
R24	1006750-40		2.2K		
R25	1006750-25		510Ω		
R26	1006750-56		10K		
R27			TBS		
R28	1006750-		TBS		
R29	1006750-		TBS		
R30	1006750	RESISTOR	TBS		

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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DRAWN W.J. Mills DATE MAY-14 63
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APPROVAL 7/3/63
APPROVAL 6/28/63
APPROVAL Eldon C Hall 6/28/63
NASA APPROVAL 7/2/63
MIT APPROVAL
MIT APPROVAL 7/2/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC DIAGRAM
AGC CLOCK OSC

CODE IDENT NO. ——
SIZE D
NASA DRAWING NO. 1006140
SCALE NONE
WT
SHEET 1 OF 1

INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

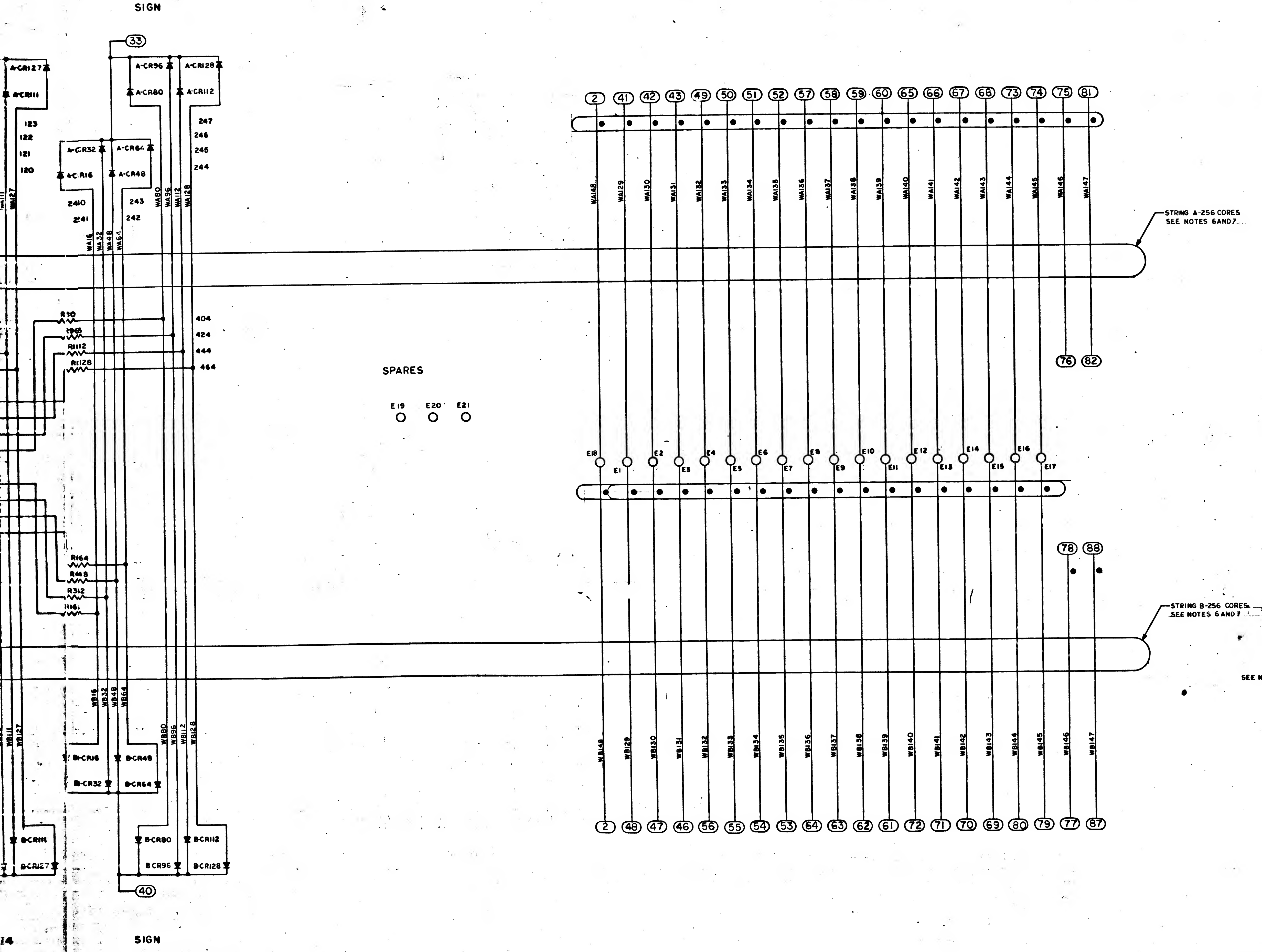
MASTER

INCHES
PHOTOGRAPHIC SCALE ONLY

A 1006144

REVISIONS 0 3 2 8 /

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 06751	3/20/	



SEE NOTE 4

WIRE ASSIGNMENT TABLE						
WIRE DESIGNATION	FUNCTION SIGN					
	STICK 1 OF ROPE			STICK 2 OF ROPE		
	R	S	T	R	S	T
WA1 - WA16	SS00	SS20	SS40	SS10	SS30	SS50
WA17 - WA32	SS01	SS21	SS 41	SS 11	SS 31	SS 51
WA33 - WA48	SS02	SS22	SS 42	SS 12	SS 32	SS 52
WA49 - WA64	SS03	SS23	SS 43	SS13	SS 33	SS 53
WB1 - WB16	SS04	SS24	SS44	SS 14	SS 34	SS 54
WB17 - WB32	SS05	SS25	SS45	SS 15	SS 35	SS 55
WB33 - WB48	SS06	SS26	SS46	SS 16	SS 36	SS 56
WB49 - WB64	SS07	SS27	SS 47	SS17	SS 37	SS 57
WA65 - WA80	SS100	SS120	SS140	SS110	SS130	SS150
WA81 - WA96	SS101	SS121	SS141	SS111	SS131	SS151
WA97 - WA112	SS102	SS122	SS142	SS112	SS132	SS152
WA113 - WA128	SS103	SS123	SS143	SS113	SS133	SS153
WB65 - WB80	SS104	SS124	SS144	SS114	SS134	SS154
WB81 - WB96	SS105	SS125	SS145	SS115	SS135	SS155
WB97 - WB112	SS106	SS126	SS146	SS116	SS 136	SS156
WB113 - WB128	SS107	SS127	SS147	SS117	SS 137	SS157
WA & WB129	RESET			RESET		
WA & WB130	7			7		
WA & WB131	$\overline{7}$			$\overline{7}$		
WA & WB132	6			6		
WA & WB133	$\overline{6}$			$\overline{6}$		
WA & WB134	5			5		
WA & WB135	$\overline{5}$			$\overline{5}$		
WA & WB136	4			4		
WA & WB137	$\overline{4}$			$\overline{4}$		
WA & WB138	3			3		
WA & WB139	$\overline{3}$			$\overline{3}$		
WA & WB140	2			2		
WA & WB141	$\overline{2}$			$\overline{2}$		
WA & WB142	1			1		
WA & WB143	$\overline{1}$			$\overline{1}$		
WA & WB144	P			P		
WA & WB145	$\overline{P}$			$\overline{P}$		
WA146	SET A			SET A		
WB146	SET C			SET C		
WA147	SET B			SET B		
WB147	SET D			SET D		
WB148	TEST LINE			TEST LINE		

SEE NOTES →

PART NO	DESCRIPTION	VALUE	TOL	RATING	QTY
1006750-39	RESISTOR	2000	±5%	1/4 W	128
1006751	DIODE				256
1006773-	CORE				512

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY | USED ON

APPLICATION

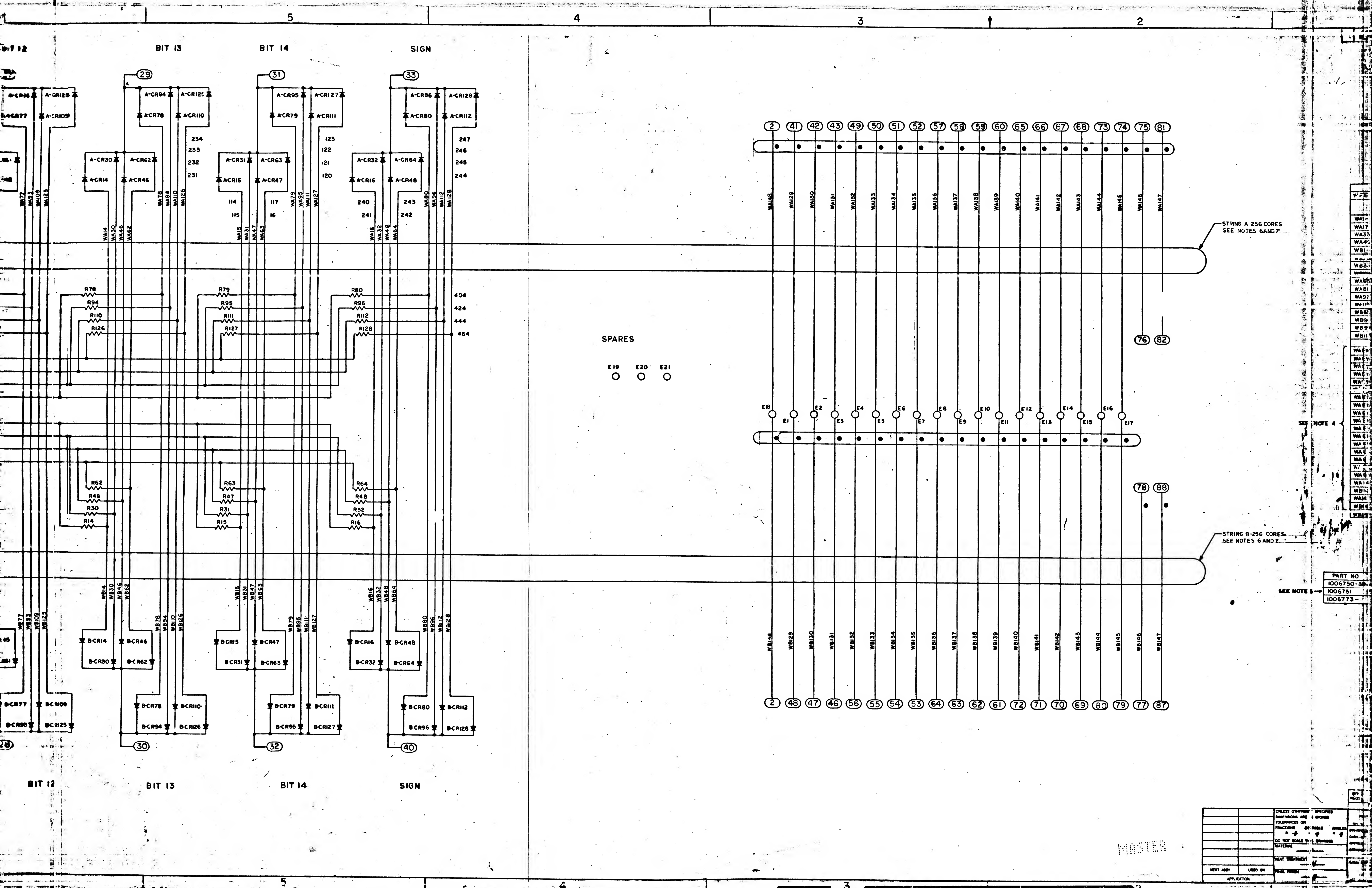
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN J. Brigham DATE 7/29/63
CHECKED
APPROVAL Albert Hopkins 9-19
APPROVAL Eldon C. Hall 19 Aug 63
NASA APPROVAL W. J. Rhine 8-19-63
MIT APPROVAL 19 Aug 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE MODULE

CODE IDENT NO. —
SIZE J
NASA DRAWING NO. 1006144
SCALE #
WT
SHEET 1 OF 2

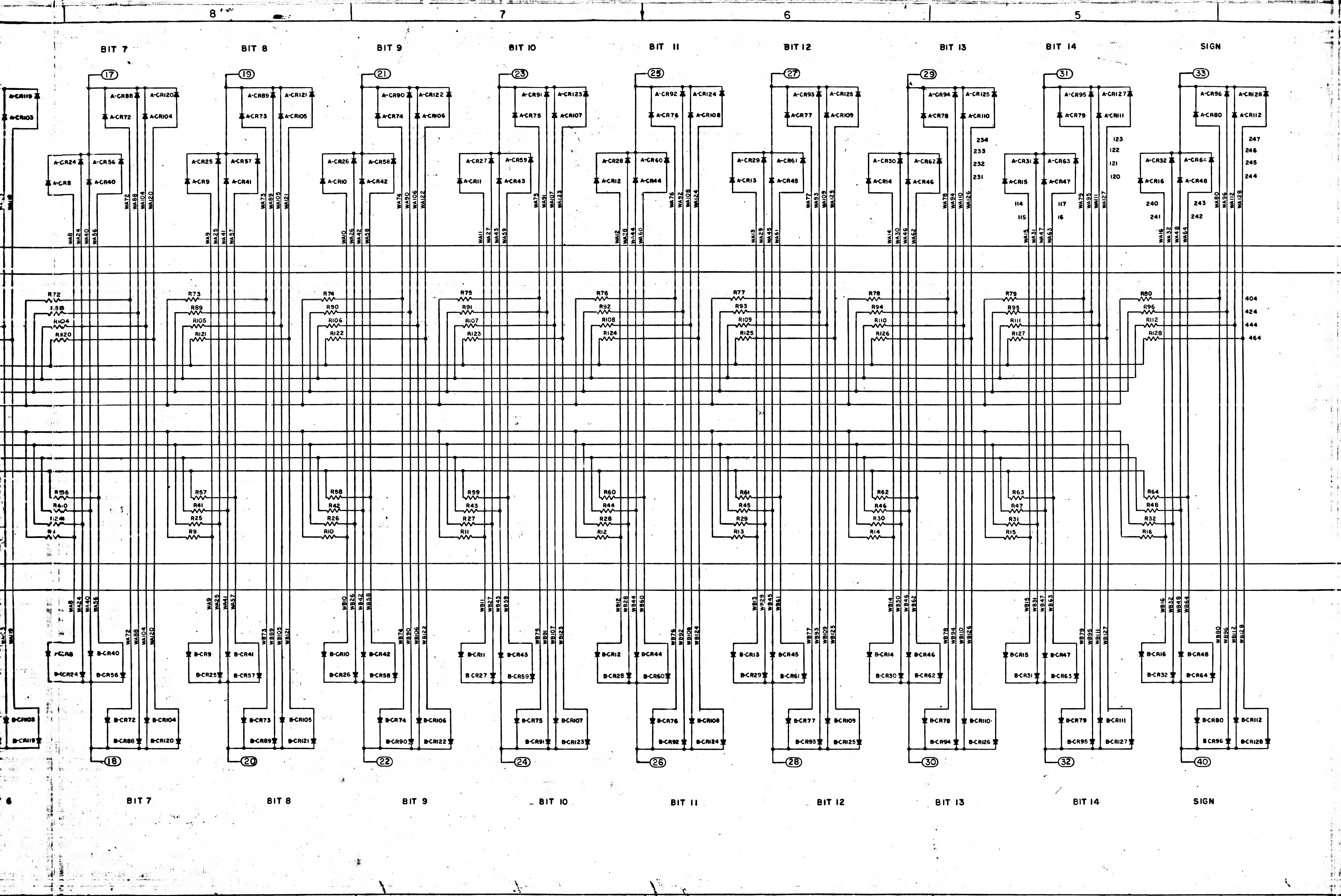


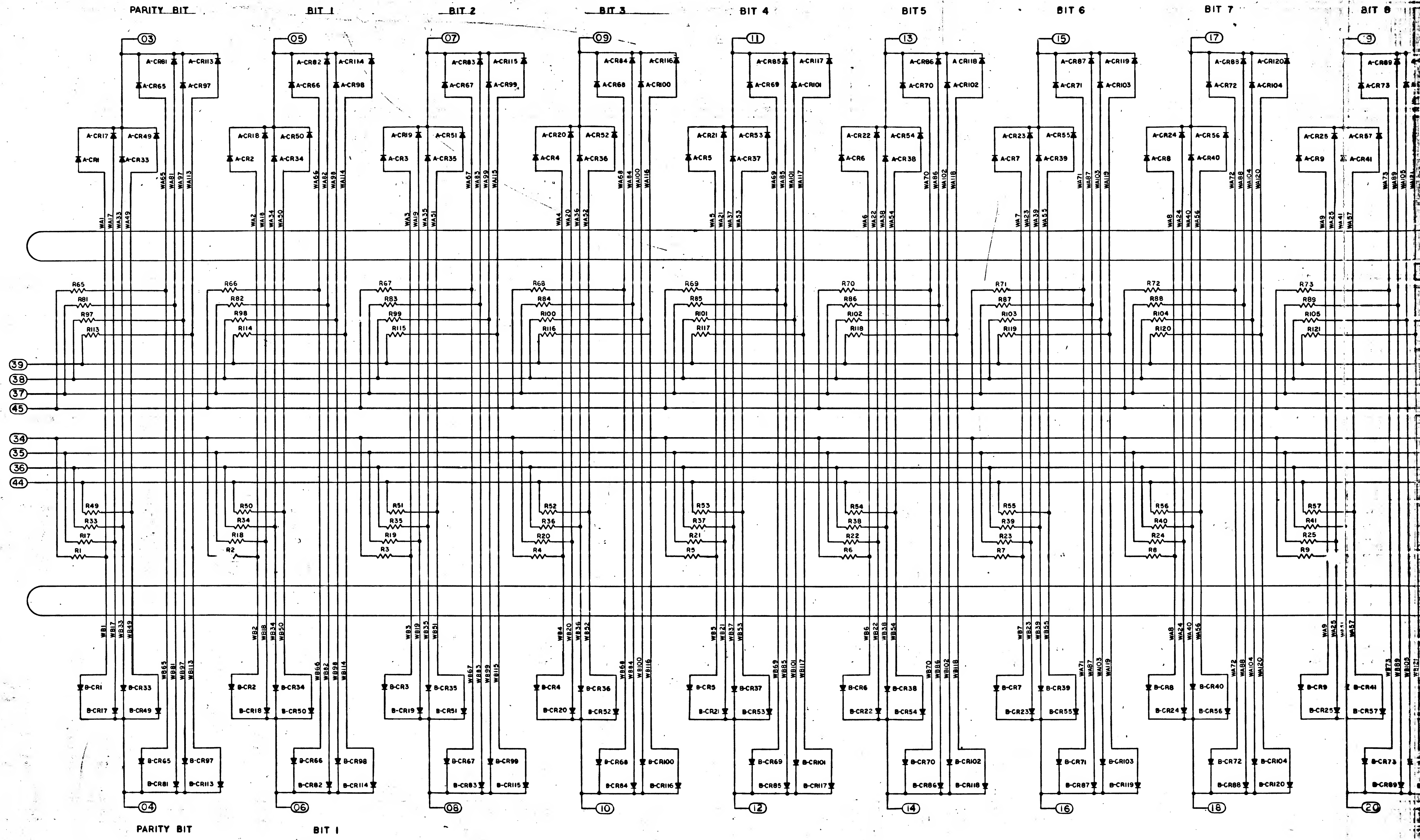
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH
NEXT ASSY USED ON
APPLICATION

INCHES
PHOTOGRAPHING SCALE ONLY

E3

1006144

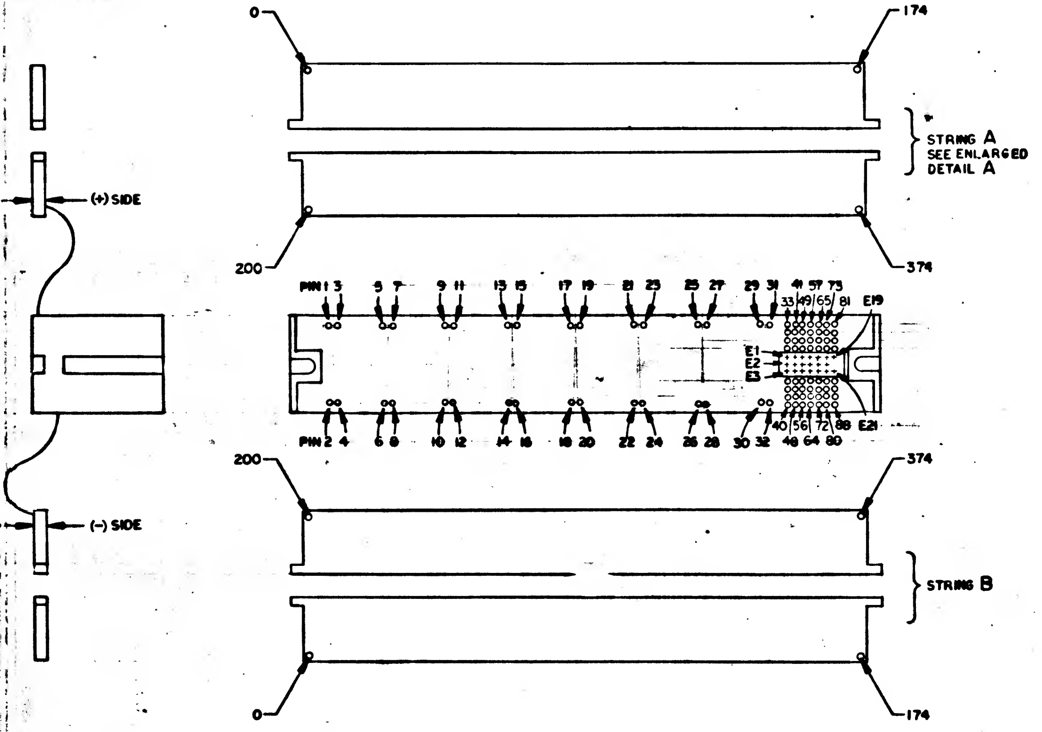

8
7
6
5
BIT 7
BIT 8
BIT 9
BIT 10
BIT 11
BIT 12
BIT 13
BIT 14
SIGN
17
19
21
23
25
27
29
31
33
A-CR88
A-CR120
A-CR72
A-CR104
A-CR24
A-CR56
A-CR8
A-CR40
A-CR119
A-CR103
R72
R88
R104
R120
R56
R40
R24
R8
B-CR8
B-CR40
B-CR24
B-CR56
B-CR72
B-CR104
B-CR88
B-CR120
B-CR103
B-CR119
234
233
232
231
123
122
121
120
247
246
245
244
114
115
117
16
240
241
243
242
404
424
444
464
18
20
22
24
26
28
30
32
40
INCHES
0
2
PHOTOGRAPHIC SCALE ONLY

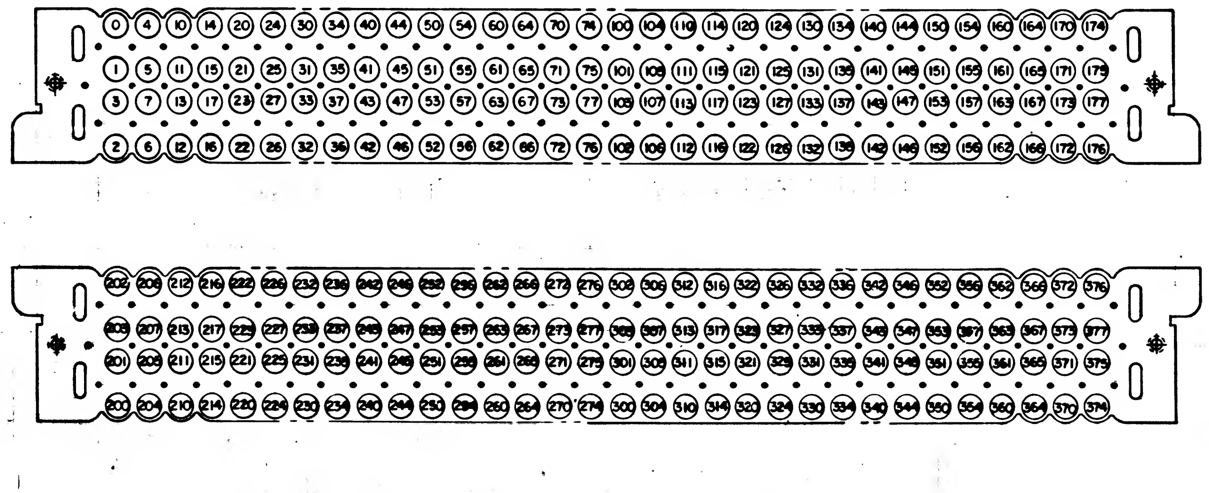


NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ~~512 CORES ARE THREADED OR BY PASSED WITH ENCLOSED LINES IN ACCORDANCE WITH ASSY SPEC~~
3. PREFIX LETTER OF REF DESIGNATIONS OF DIODES DENOTES STRING NUMBER
4. "BAR" WIRES DO NOT THREAD FIRST CORE AND DO THREAD LAST CORE
5. DIODES MUST BE MATCHED PAIRS
6. FOR INHIBIT WIRING THRU CORES - SEE SHEET 2
7. SENSE WIRING THRU CORES IN ACCORDANCE WITH 'APPLIABLE MODULE DECK

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR 06751	7/3/64	

1006144 A





DETAIL A

1006144 A

REV A. THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
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APPROVAL
APPROVAL 17 Feb 64
NASA APPROVAL
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE MODULE

CODE IDENT NO. —
SIZE J
NASA DRAWING NO. 1006144
SCALE NONE
WT
SHEET 2 OF 2

1006144 A

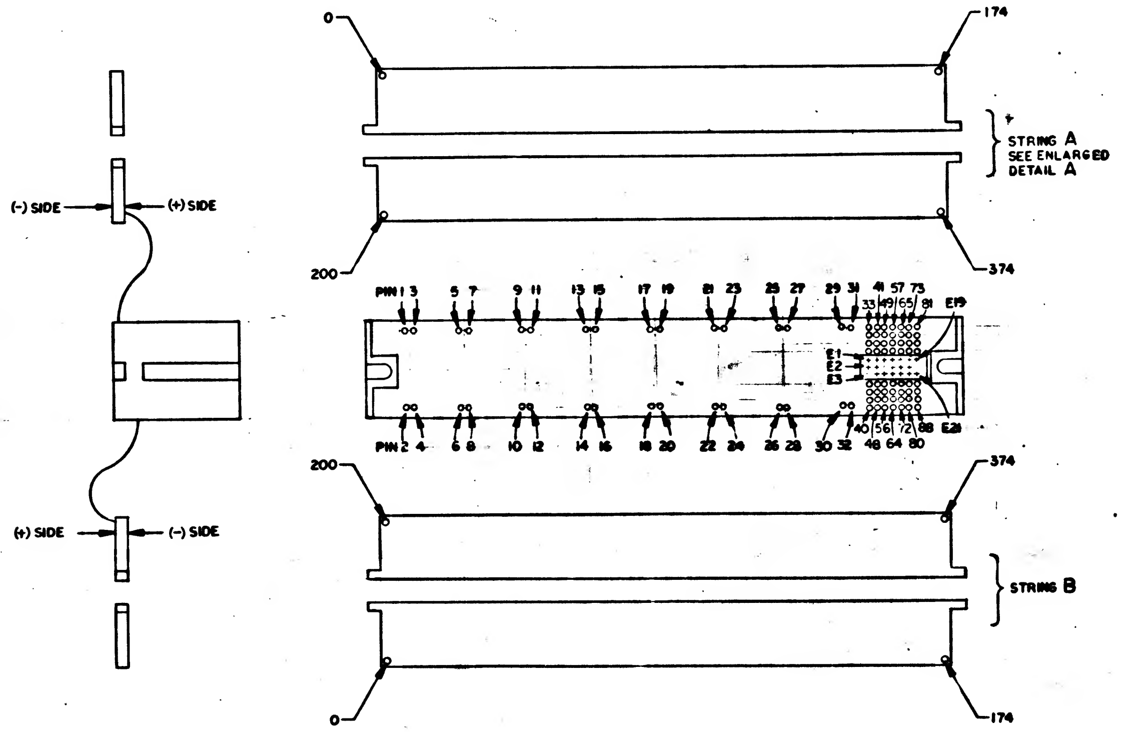
MASTER

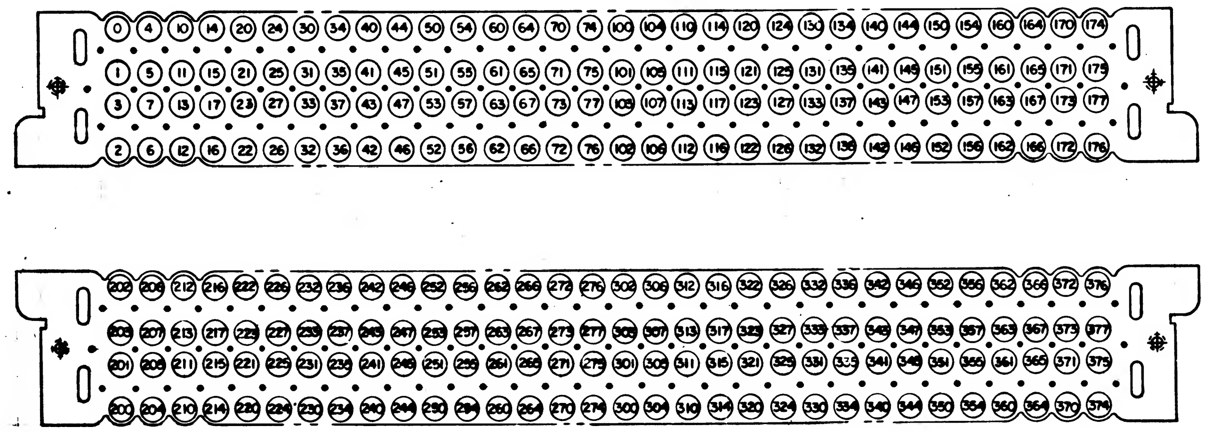
INCHES
PHOTOGRAPHIC SCALE ONLY

F4

1006144 A

SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR 06751	3/9/64	





DETAIL A

REV A. THIS SHEET ADDED

QTY REQD | PART OR IDENTIFYING NO. | NOMENCLATURE OR DESCRIPTION | FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON

APPLICATION

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HEAT TREATMENT
FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE
CHECKED 31 Jan 64
APPROVAL
APPROVAL 17 Feb 64
NASA APPROVAL
MIT APPROVAL

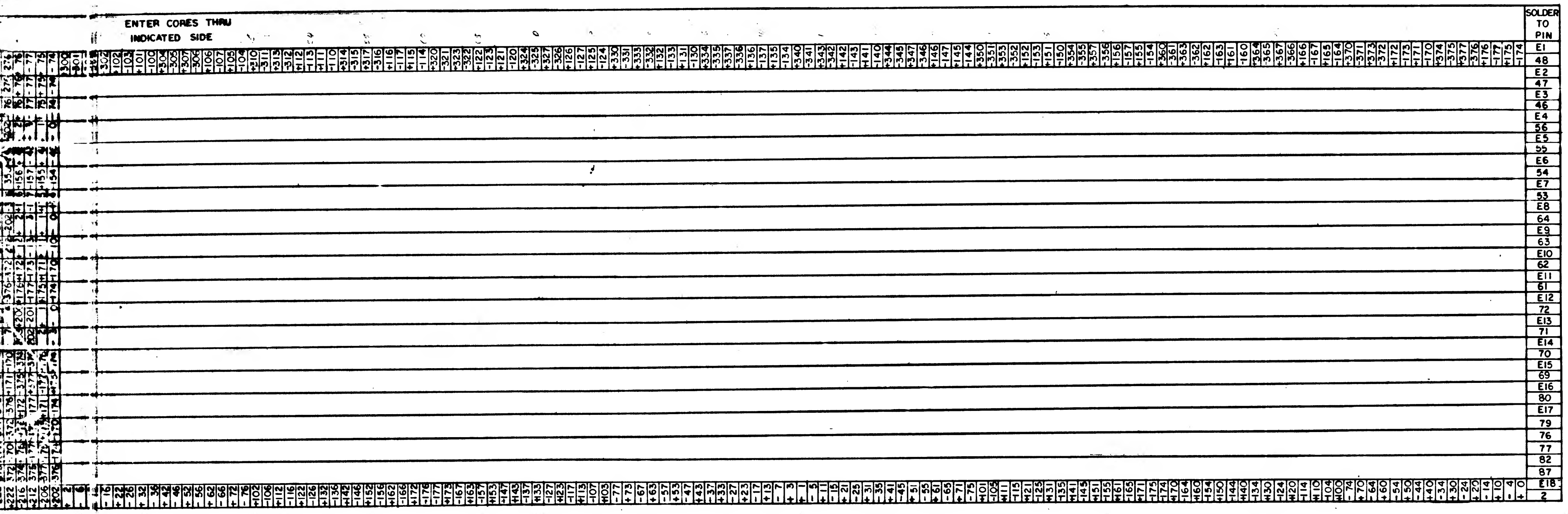
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

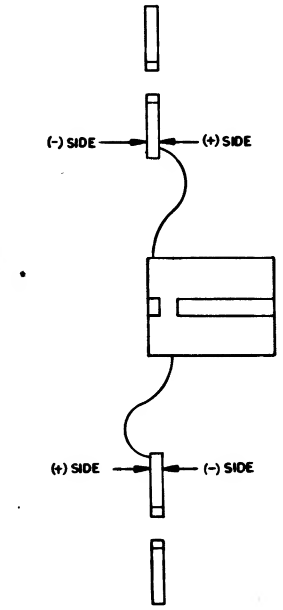
SCHEMATIC
ROPE MODULE

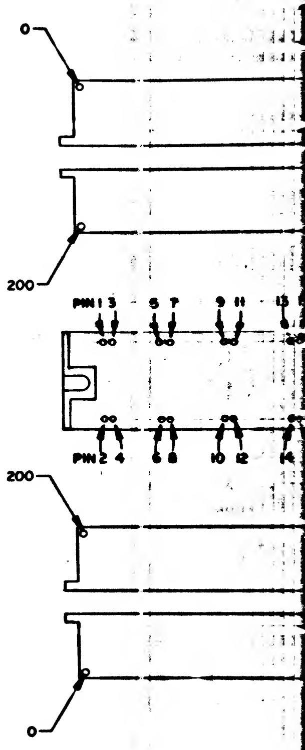
CODE IDENT NO. —
SIZE J
NASA DRAWING NO. 1006144
SCALE NONE
WT
SHEET OF

MASTER

1006144 A







INCHES
PHOTOGRAPHIC SCALE ONLY

INHIBIT WIRING TABLE

ENTER CORES THRU INDICATED SIDE

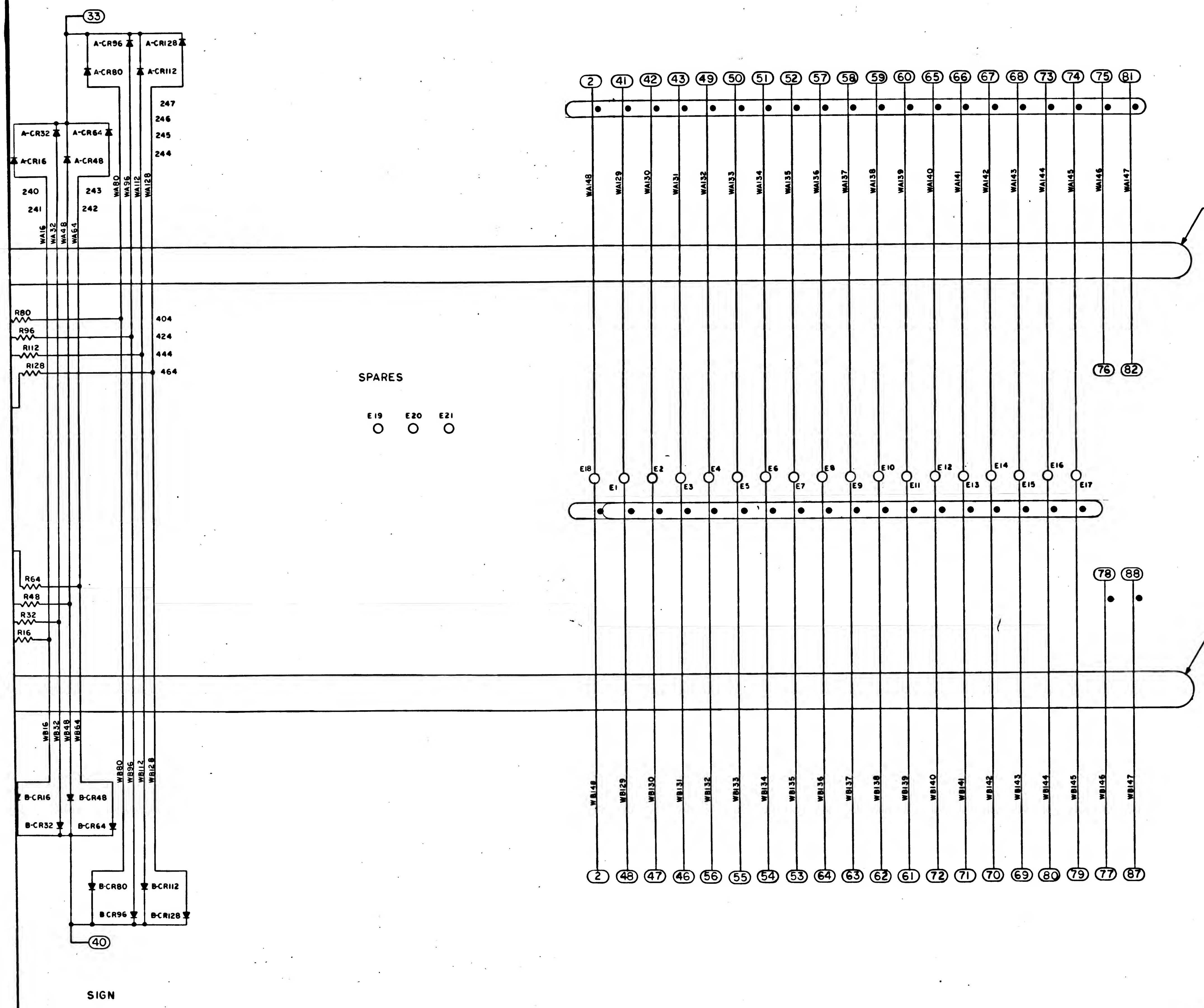
WIRE NO.	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148
STRING A	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
STRING B	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
SOLDER TO PIN	41 E1	42 E2	43 E3	49 E4	50 E5	51 E6	52 E7	57 E8	58 E9	59 E10	60 E11	65 E12	66 E13	67 E14	68 E15	73 E16	74 E17	75 78	81 88	1 E18
	+200	+200	+300	+33	+374	+200	+220	+364	+374	+200	+204	+374	+377	+200	-201	+200	+204	+2	+200	+200
	-201	-201	-301	-33	-375	-201	-221	-365	-375	-201	-205	-375	-376	-202	+203	-205	-201	-3	-201	-204
	+203	+203	+303	+33	+377	+203	+223	+367	+377	+203	+207	+175	+176	+2	-3	+203	+207	+1	+203	+210
	-202	-202	-302	-33	-376	-202	-222	-366	-376	-202	-206	-174	-177	-0	+1	-206	-202	-0	-202	-214
	+2	+2	+102	+13	+176	+2	+22	+166	+176	+2	+6	+370	+373	+204	-205	+2	+6	+6	+204	+220
	-3	-3	-103	-13	-177	-3	-23	-167	-177	-3	-7	-371	-372	-206	+207	-7	-3	-7	-205	-224
	+1	+1	+101	+13	+175	+1	+21	+165	+175	+1	+5	+171	+172	+6	-7	+1	+5	+5	+207	+230
	-0	-0	-100	-13	-174	-0	-20	-164	-174	-0	-4	-170	-173	-4	+5	-1	-0	-4	-206	-234
	+204	+204	+304	+33	+370	04	+224	+360	+370	+210	+214	+364	+367	+210	-211	+214	+210	+12	+210	+240
	-205	-205	-305	-33	-371	05	-225	-361	-371	-211	-215	-365	-366	-212	+213	-211	-215	-13	-211	-244
	+207	+207	+307	+33	+373	07	+227	+363	+373	+213	+217	+165	+166	+12	-13	+217	+213	+11	+213	+250
	-206	-206	-306	-33	-372	06	-226	-362	-372	-212	-216	-164	-167	-10	+11	-212	-216	-10	-212	-254
	+6	+6	+106	+13	+172	+6	+26	+162	+172	+12	+16	+360	+363	+214	-215	+16	+12	+16	+214	+260
	-7	-7	-107	-13	-173	-7	-27	-163	-173	-13	-17	-361	-362	-216	+217	-13	-17	-17	-215	-264
	+5	+5	+105	+13	+171	+5	+25	+161	+171	+11	+15	+161	+162	+16	-17	+15	+11	+15	+217	+270
	-4	-4	-104	-13	-170	-4	-24	-160	-170	-10	-14	-160	-163	-14	+15	-10	-14	-14	-216	-274
	+210	+210	+310	+32	+364	10	+230	+344	+354	+220	+224	+354	+357	+220	-221	+224	+220	+22	+220	+300
	-211	-211	-311	-32	-365	11	-231	-345	-355	-221	-225	-355	-356	-222	+223	-221	-225	-23	-221	-304
	+213	+213	+313	+32	+367	13	+233	+347	+357	+223	+227	+155	+156	+22	-23	+227	+223	+21	+223	+310
	-212	-212	-312	-32	-366	12	-232	-346	-356	-222	-226	-154	-157	-20	+21	-222	-226	-20	-222	-314
	+12	+12	+112	+12	+166	12	+32	+146	+156	+22	+26	+350	+353	+224	225	+26	+22	+26	+224	+320
	-13	-13	-113	-12	-167	13	-33	-147	-157	-23	-27	-351	-352	-226	+227	-23	-27	-27	-225	-324
	+11	+11	+111	+12	+165	11	+31	+145	+155	+21	+25	+151	+152	+26	-27	+25	+21	+25	+227	+330
	-10	-10	-110	-12	-164	10	-30	-144	-154	-20	-24	-150	-153	-24	+25	-20	-24	-24	-226	-334
	+214	+214	+314	+32	+360	14	+234	+340	+350	+230	+234	+344	+347	+230	-231	+230	+234	+32	+230	+340
	-215	-215	-315	-32	-361	15	-235	-341	-351	-231	-235	-345	-346	-232	+233	-235	-231	-33	-231	-344
	+217	+217	+317	+32	+363	17	+237	+343	+353	+233	+237	+145	+146	+32	-33	+233	+237	+31	+233	+350
	-216	-216	-316	-32	-362	16	-236	-342	-352	-232	-236	-144	-147	-30	+31	-236	-232	-30	-232	-354
	+16	+16	+116	+12	+162	16	+36	+142	+152	+32	+36	+340	+343	+234	-235	+32	+36	+36	+234	+360
	-17	-17	-117	-12	-163	17	-37	-143	-153	-33	-37	-341	-342	-236	+237	-37	-33	-37	-235	-364
	+15	+15	+115	+12	+161	15	+35	+141	+151	+31	+35	+141	+142	+36	-37	+31	+35	+35	+237	+370
	-14	-14	-114	-12	-160	14	-34	-140	-150	-30	-34	-140	-143	-34	+35	-34	-30	-34	-236	-374
	+220	+220	+320	+31	+354	40	+260	+324	+334	+240	+244	+334	+337	+240	-241	+244	+240	+42	+240	-375
	-221	-221	-321	-31	-355	41	-261	-325	-335	-241	-245	-335	-336	-242	+243	-241	-245	-43	-241	+371
	+223	+223	+323	+31	+357	43	+263	+327	+337	+243	+247	+135	+136	+42	-43	+247	+243	+41	+243	-365
	-222	-222	-322	-31	-356	42	-262	-326	-336	-242	-246	-134	-137	-40	+41	-242	-246	-40	-242	+361
	+22	+22	+122	+11	+156	42	+62	+126	+136	+42	+46	+330	+333	+244	-245	+46	+42	+46	+244	-355
	-23	-23	-123	-11	-157	43	-63	-127	-137	-43	-47	-331	-332	-246	+247	-43	-47	-47	-245	+351
	+21	+21	+121	+11	+155	41	+61	+125	+135	+41	+45	+131	+132	+46	-47	+45	+41	+45	+247	-345
	-20	-20	-120	-11	-154	40	-60	-124	-134	-40	-44	-130	-133	-44	+45	-40	-44	-44	-246	+341
	+224	+224	+324	+3	+350	44	+264	+320	+330	+250	+254	+324	+327	+250	-251	+250	+254	+52	+250	-335
	-225	-225	-325	-3	-351	45	-265	-321	-331	-251	-255	-325	-326	-252	+253	-255	-251	-53	-251	+331
	+227	+227	+327	+3	+353	47	+267	+323	+333	+253	+257	+125	+126	+52	-53	+253	+257	+51	+253	-325
	-226	-226	-326	-3	-352	46	-266	-322	-332	-252	-256	-124	-127	-50	+51	-256	-252	-50	-252	+321
	+26	+26	+126	+11	+152	46	+66	+122	+132	+52	+56	+320	+323	+254	-255	+52	+56	+56	+254	-315
	-27	-27	-127	-11	-153	47	-67	-123	-133	-53	-57	-321	-322	-256	+257	-57	-53	-57	-255	+311
	+25	+25	+125	+11	+151	45	+65	+121	+131	+51	+55	+121	+122	+56	-57	+51	+55	+55	+257	-305
	-24	-24	-124	-11	-150	44	-64	-120	-130	-50	-54	-120	-123	-54	+55	-54	-50	-54	-256	+301
	+230	+230	+330	+3	+344	50	+270	+304	+314	+260	+264	+314	+317	+260	-261	+260	+264	+62	+260	-275
	-231	-231	-331	-3	-345	51	-271	-305	-315	-261	-265	-315	-316	-262	+263	-265	-261	-63	-261	+271
	+233	+233	+333	+3	+347	53	+273	+307	+317	+263	+267	+115	+116	+62	-63	+263	+267	+61	+263	-265
	-232	-232	-332	-3	-346	52	-272	-306	-316	-262	-266	-114	-117	-60	+61	-266	-262	-60	-262	+261
	+32	+32	+132	+10	+146	52	+72	+106	+116	+62	+66	+310	+313	+264	-265	+62	+66	+66	+264	-255
	-33	-33	-133	-10	-147	53	-73	-107	-117	-63	-67	-311	-312	-266	+267	-67	-63	-67	-265	+251
	+31	+31	+131	+10	+145	51	+71	+105	+115	+61	+65	+111	+112	+66	-67	+61	+65	+65	+267	-245
	-30	-30	-130	-10	-144	50	-70	-104	-114	-60	-64	-110	-113	-64	+65	-64	-60	-64	-266	+241
	+234	+234	+334	+3	+340	54	+274	+300	+310	+270	+274	+304	+307	+270	-271	+274	+270	+72	+270	-235
	-235	-235	-335	-3	-341	55	-275	-301	-311	-271	-275	-305	-306	-272	+272	-271	-275	-73	-271	+231
	+237	+237	+337	+3	+343	57	+277	+303	+313	+273	+277	+105	+106	+72	-72	+277	+273	+71	+273	-225
	-236	-236	-336	-3	-342	56	-276	-302	-312	-272	-276	-104	-107	-70	+71	-272	-276	-70	-272	+221
	+36	+36	+136	+10	+142	56	+76	+102	+112	+72	+76	+300	+303	+274	-275	+76	+72	+76	+274	-215
	-37	-37	-137	-10	-143	57	-77	-103	-113	-73	-77	-301	-302	-276	+277	-73	-77	-77	-275	+211
	+35	+35	+135	+10	+141	55	+75	+101	+111	+71	+75	+101	+102	+76	-77	+75	+71	+75	+277	-205
	-34	-34	-134	-10	-140	54	-74	-100	-110	-70	-74	-100	-103	-74	+75	-70	-74	-74	-276	+201
	+240	+240	+340	+23	+274	00	+320	+264	+274	+300	+304	+274	+277	+300	-301	+304	+300	+102	+300	+203
	-241	-241	-341	-23	-275	01	-321	-265	-275	-301	-305	-275	-276	-302	+303	-301	-305	-103	-301	-207
	+243	+243	+343	+23	+277	03	+323	+267	+277	+303	+307	+75	+76	+102	-103	+307	+303	+101	+303	+213
	-242	-242	-342	-23	-276	02	-322	-266	-276	-302	-306	-74	-77	-100	+101	-302	-306	-100	-302	-217
	+42	+42	+142	+3	+76	02	+122	+66	+76	+102	+106	+270	+273	+304	-305	+106	+102	+106	+304	+223
	-43	-43	-143	-3	-77	03	-123	-67	-77	-103	-107	-271	-272	-306	+307	-103	-107	-107	-305	-227
	+41	+41	+141	+3	+75	01	+121	+65	+75	+101	+105	+71	+72	+106	-107	+105	+101	+105	+307	+233
	-40	-40	-140	-3	-74	00	-120	-64	-74	-100	-104	-70	-73	-104	+105	-100	-104	-104	-306	-237
	+244	+244	+344	+23	+270	04	+324	+260	+270	+310	+314	+264	+267	+310	-311	+310	+314	+112	+310	+243
	-245	-245	-345	-23	-271	[illegible]	-325	-261	-271	-311	-315	-265	-266	-312	+313	-315	-311	-113	-311	-247
	+247	+247	+347	+23	+27	07	+327	+263	+273	+313	+317	+65	+66	+112	-113	+313	+317	+111	+313	+253
	-246	-246	-346	-23	-272	06	-326	-262	-272	-312	-316	-64	-67	-110	+111	-316	-312	-110	-312	-257
	+46	+46	+146	+3	+72	06	+126	+62	+72	+112	+116	+260	+263	+314	-315	+112	+116	+116	+314	+263
	-47	-47	-147	-3	-73	07	-127	-63	-73	-113	-117	-261	-262	-316	+317	-117	-113	-117	-315	-267
	+45	+45	+145	+3	+71	05	+125	+61	+71	+111	+115	+61	+62	+116	-117	+111	+115	+115	+317	+273
	-44	-44	-144	-3	-70	04	-124	-60	-70	-110	-114	-60	-63	-114	+115	-114	-110	-114	-316	-277
	+250	+250	+350	+22	+264	10	+330	+244	+254	+320	+324	+254	+257	+320	-321	+320	+324	+122	+320	+303
	-251	-251	-351	-22	-265	11	-331	-245	-255	-321	-325	-255	-256	-322	+323	-325	-321	-123	-321	-307
	+253	+253	+353	+22	+267	13	+333	+247	+257	+323	+327	+55	+56	+122	-123	+323	+327	+121	+323	+313
	-252	-252	-352	-22	-266	12	-332	-246	-256	-322	-326	-54	-57	-120	+121	-326	-322	-120	-322	-317
	+52	+52	+152	+2	+66	12	+132	+46	+56	+122	+126	+250	+253	+324	-325	+122	+126	+126	+324	+323
	-53	-53	-153	-2	-67	13	-133	-47	-57	-123	-127	-251	-252	-326	+327	-127	-123	-127	-325	-327
	+51	+51	+151	+2	+65	11	+131	+45	+55	+121	+125	+51	+52	+126	-127	+121	+125	+125	+327	+333
	-50	-50	-150	-2	-64	10	-130	-44	-54	-120	-124	-50	-53	-124	+125	-124	-120	-124	-326	-337
	+254	+254	+354	+22	+260	14	+334	+240	+250	+330	+334	+244	+247	+330	-331	+334	+330	+132	+330	+343
	-255	-255	-355	-22	-261	15	-335	-241	-251	-331	-335	-245	-246	-332	+333	-331	-335	-133	-331	-347
	+257	+257	+357	+22	+263	17	+337	+243	+253	+333	+337	+45	+46	+132	-133	+337	+333	+131	+333	+353
	-256	-256	-356	-22	-262	16	-336	-242	-252	-332	-336	-44	-47	-130	+131	-332	-336	-130	-332	-357
	+56	+56	+156	+2	+62	16	+136	+42	+52	+132	+136	+240	+243	+334	-335	+136	+132	+136	+334	+363
	-57	-57	-157	-2	-63	17	-137	-43	-53	-133	-137	-241	-242	-336	+337	-13	-137	-137	-335	-367
	+55	+55	+155	+2	+61	15	+135	+41	+51	+131	+135	+41	+42	+136	-137	+13	+131	+135	+337	+373
	-54	-54	-154	-2	-60	14	-134	-40	-50	-130	-134	-40	-43	-134	+135	-130	-134	-134	-336	-377
	+260	+260	+360	+21	+254	40	+360	+224	+234	+340	+344	+234	+237	+340	-341	+340	+344	+142	+340	-376
	-261	-261	-361	-21	-255	41	-361	-225	-235	-341	-345	-235	-236	-342	+343	-345	-341	-143	-341	+372
	+263	+263	+363	+21	+257	43	+363	+227	+237	+343	+347	+35	+36	+142	-143	+34	+347	+141	+343	-366
	-262	-262	-362	-21	-256	42	-362	-226	-236	-342	-346	-34	-37	-140	+141	-346	-342	-140	-342	+362
	+62	+62	+162	+1	+56	42	+162	+26	+36	+142	+146	+230	+233	+344	-345	+142	+146	+146	+344	-356
	-63	-63	-163	-1	-57	43	-163	-27	-37	-143	-147	-231	-232	-346	+347	-147	-143	-147	-345	+352
	+61	+61	+161	+1	+55	41	+161	+25	+35	+141	+145	+31	+32	+146	-147	+141	+145	+145	+347	-346
	-60	-60	-160	-1	-54	40	-160	-24	-34	-140	-144	-30	-33	-144	+145	-144	-140	-144	-346	+342
	+264	+264	+364	+21	+250	44	+364	+220	+230	+350	+354	+224	+227	+350	-351	+354	+350	+152	+350	-336
	-265	-265	-365	-21	-251	45	-365	-221	-231	-351	-355	-225	-226	-352	+353	-351	-355	-153	-351	+332
	+267	+267	+367	+21	+253	47	+367	+223	+233	+353	+357	+25	+26	+152	-153	+357	+353	+151	+353	-326
	-266	-266	-366	-21	-252	46	-366	-222	-232	-352	-356	-24	-27	-150	+151	-352	-356	-150	-352	+322
	+66	+66	+166	+1	+52	16	+166	+22	+32	+152	+156	+220	+223	+354	-355	+156	+152	+156	+354	-316
	-67	-67	-167	-1	-53	17	-167	-23	-33	-153	-157	-221	-222	-356	+357	-153	-157	-157	-355	+312
	+65	+65	+165	+1	+51	15	+165	+21	+31	+151	+155	+21	+22	+156	-157	+155	+151	+155	+357	-306
	-64	-64	-164	-1	-50	14	-164	-20	-30	-150	-154	-20	-23	-154	+155	-150	-154	-154	-356	+302
	+270	+270	+370	+20	+244	50	+370	+204	+214	+360	+364	+214	+217	+360	-361	+364	+360	+162	+360	-276
	-271	-271	-371	-20	-245	51	-371	-205	-215	-361	-365	-215	-216	-362	+363	-361	-365	-163	-361	+272
	+273	+273	+373	+20	+247	53	+373	+207	+217	+363	+367	+15	+16	+162	-163	+367	+363	+161	+363	-266
	-272	-272	-372	-20	-246	52	-372	-206	-216	-362	-366	-14	-17	-160	+161	-362	-366	-160	-362	+262
	+72	+72	+172	+	+46	2	+172	+6	+16	+162	+166	+210	+213	+364	-365	+166	+162	+166	+364	-256
	-73	-73	-173	-	-47	3	-173	-7	-17	-163	-167	-211	-212	-366	+367	-163	-167	-167	-365	+252
	+71	+71	+171	+5	+45	1	+171	+5	+15	+161	+165	+11	+12	+166	-167	+165	+161	+165	+367	-246
	-70	-70	-170	-4	-44	0	-170	-4	-14	-160	-164	-10	-13	-164	+165	-160	-164	-164	-366	+242
	+274	+274	+374	+20	+240	54	+374	+200	+210	+370	+374	+204	+207	+370	-371	+370	+374	+172	+370	-236
	-275	-275	-375	-20	-241	55	-375	-201	-211	-371	-375	-205	-206	-372	+373	-375	-371	-173	-371	+232
	+277	+277	+377	+20	+243	57	+377	+203	+213	+373	+377	+5	+6	+172	-173	+373	+377	+171	+373	-226
	-276	-276	-376	-20	-242	56	-376	-202	-212	-372	-376	-4	-7	-170	+171	-376	-372	-170	-372	+222
	+76	+76	+176	+	+42	6	+176	+2	+12	+172	+176	+200	+203	+374	-375	+172	+176	+176	+374	-216
	-77	-77	-177	-	-43	7	-177	-3	-13	-173	-177	-201	-202	-376	+377	-177	-173	-177	-375	+212
	+75	+75	+175	+	+41	5	+175	+1	+11	+171	+175	+1	+2	+176	-177	+171	+175	+175	+377	-206
	-74	-74	-174	-	-40	4	-174	-0	-10	-170	-174	-0	-3	-174	+175	-174	-170	-174	-376	+202
	+300																			+2
	-301																			-6
	+303																			+12
	-302																			-16
	+102																			+22
	-103																			-26
	+101																			+32
	-100																			-36
	+304																			+42
	-305																			-46
	+307																			+52
	-306																			-56
	+106																			+62
	-107																			-66
	+105																			+72
	-104																			-76
	+310																			+102
	-311																			-106
	+313																			+112
	-312																			-116
	+112																			+122
	-113																			-126
	+111																			+132
	-110																			-136
	+314																			+142
	-315																			-146
	+317																			+152
	-316																			-156
	+116																			+162
	-117																			-166
	+115																			+172
	-114																			-176
	+320																			-177
	-321																			+173
	+323																			-167

1006144

INCHES
PHOTOGRAPHIC SCALE ONLY

B 1006144

SYM	DESCRIPTION	DATE	APPROVED
A	REVISED PER TDRR 06751		
B	REVISED PER TDRR 13998 DR CHK	12/2/64	



SEE NOTE 4

WIRE ASSIGNMENT TABLE						
WIRE DESIGNATION	FUNCTION SIGN					
	STICK 1 OF ROPE			STICK 2 OF ROPE		
	R	S	T	R	S	T
WA1 – WA16	SS00	SS20	SS40	SS10	SS30	SS50
WA17 – WA32	SS01	SS21	SS41	SS11	SS31	SS51
WA33 – WA48	SS02	SS22	SS42	SS12	SS32	SS52
WA49 – WA64	SS03	SS23	SS43	SS13	SS33	SS53
WB1 – WB16	SS04	SS24	SS44	SS14	SS34	SS54
WB17 – WB32	SS05	SS25	SS45	SS15	SS35	SS55
WB33 – WB48	SS06	SS26	SS46	SS16	SS36	SS56
WB49 – WB64	SS07	SS27	SS47	SS17	SS37	SS57
WA65 – WA80	SS100	SS120	SS140	SS110	SS130	SS150
WA81 – WA96	SS101	SS121	SS141	SS111	SS131	SS151
WA97 – WA112	SS102	SS122	SS142	SS112	SS132	SS152
WA113 – WA128	SS103	SS123	SS143	SS113	SS133	SS153
WB65 – WB80	SS104	SS124	SS144	SS114	SS134	SS154
WB81 – WB96	SS105	SS125	SS145	SS115	SS135	SS155
WB97 – WB112	SS106	SS126	SS146	SS116	SS136	SS156
WB113 – WB128	SS107	SS127	SS147	SS117	SS137	SS157
WA&WB129	RESET			RESET		
WA&WB130	7			7		
WA&WB131	$\overline{7}$			$\overline{7}$		
WA&WB132	6			6		
WA&WB133	$\overline{6}$			$\overline{6}$		
WA&WB134	5			5		
WA&WB135	$\overline{5}$			$\overline{5}$		
WA&WB136	4			4		
WA&WB137	$\overline{4}$			$\overline{4}$		
WA&WB138	3			3		
WA&WB139	$\overline{3}$			$\overline{3}$		
WA&WB140	2			2		
WA&WB141	$\overline{2}$			$\overline{2}$		
WA&WB142	1			1		
WA&WB143	$\overline{1}$			$\overline{1}$		
WA&WB144	P			P		
WA&WB145	$\overline{P}$			$\overline{P}$		
WA146	SET A			SET A		
WB146	SET C			SET C		
WA147	SET B			SET B		
WB147	SET D			SET D		
WB148	TEST LINE			TEST LINE		

SEE NOTES→

PART NO	DESCRIPTION	VALUE	TOL	RATING	QTY
1006750-39	RESISTOR	2000	±5%	1/4 W	128
1006751	DIODE				256
1006773-	CORE				512

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE 7/29/63
CHECKED
APPROVAL 9-19
APPROVAL Eldon C Hall 19 Aug 63
NASA APPROVAL 9-19-63
MIT APPROVAL 19 Aug 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE MODULE

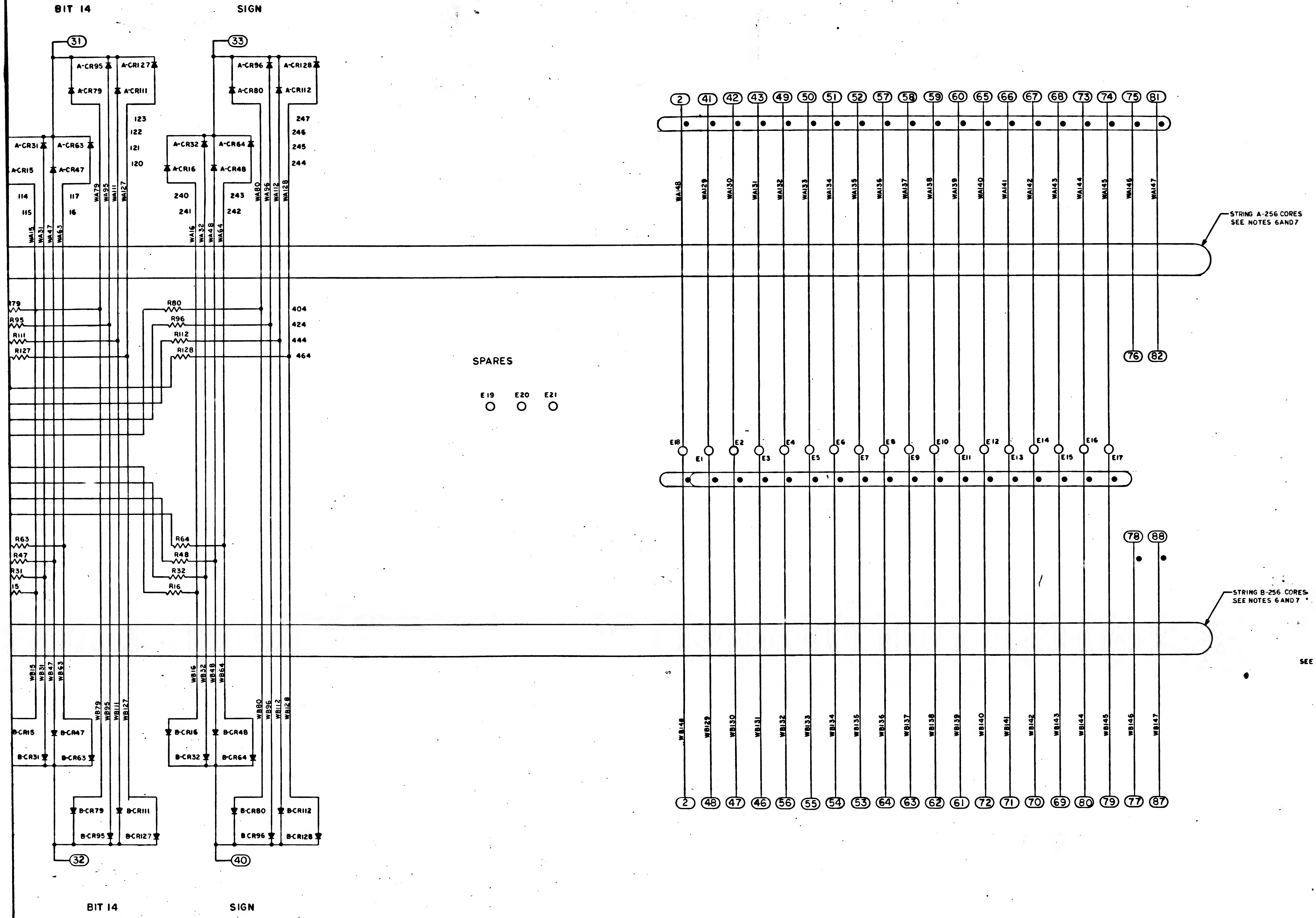
CODE IDENT NO. — SIZE J NASA DRAWING NO. 1006144
SCALE — WT SHEET 1 OF 2

1006144 B

MASTER

B 1006144

A	REVISED
B	REVISED DR & arw



WIRE ASSIGNMENT

WIRE DESIGNATION	STICK 1 OF R	S
WA1 – WA16	SS00	SS20
WA17 – WA32	SS01	SS21
WA33 – WA48	SS02	SS22
WA49 – WA64	SS03	SS23
WB1 – WB16	SS04	SS24
WB17 – WB32	SS05	SS25
WB33 – WB48	SS06	SS26
WB49 – WB64	SS07	SS27
WA65 – WA80	SS100	SS120
WA81 – WA96	SS101	SS121
WA97 – WA112	SS102	SS122
WA113 – WA128	SS103	SS123
WB65 – WB80	SS104	SS124
WB81 – WB96	SS105	SS125
WB97 – WB112	SS106	SS126
WB113 – WB128	SS107	SS127
WA & WB129	RESET	
WA & WB130	7	
WA & WB131	$\overline{7}$	
WA & WB132	6	
WA & WB133	$\overline{6}$	
WA & WB134	5	
WA & WB135	$\overline{5}$	
WA & WB136	4	
WA & WB137	$\overline{4}$	
WA & WB138	3	
WA & WB139	$\overline{3}$	
WA & WB140	2	
WA & WB141	$\overline{2}$	
WA & WB142	1	
WA & WB143	$\overline{1}$	
WA & WB144	P	
WA & WB145	$\overline{P}$	
WA146	SET A	
WB146	SET C	
WA147	SET B	
WB147	SET D	
WB148	TEST LINE	

SEE NOTE 4

SEE NOTES 5 →

PART NO	DESCRIPTION	VAL
1006750-39	RESISTOR	200
1006751	DIODE	
1006773-	CORE	

QTY REQD	PART OR IDENTIFYING NO.

LIST OF M

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE MASS

DRAWN J. Brigham DATE 7/29/63
CHECKED
APPROVAL Albert Hopkins 9-19
APPROVAL Eldon C Hall 19 Aug 63
NASA APPROVAL W. J. Rhine 9-19-63
MIT APPROVAL W. Gifford 19 Sep 63

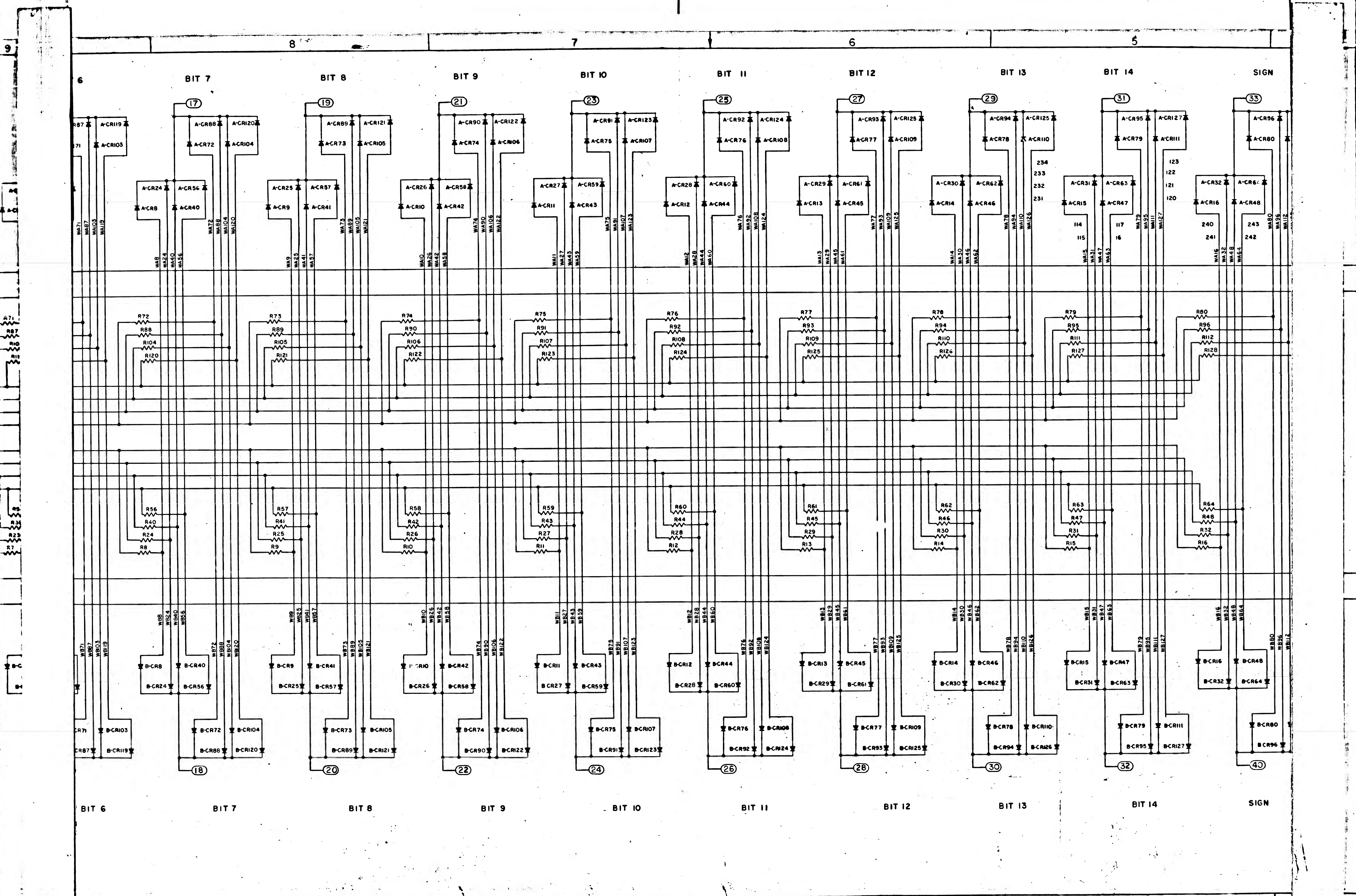
CODE IDENT NO
SCALE #

MASTER

1006144 B P3644

SHEET 1

2

9
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6
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BIT 6
BIT 7
BIT 8
BIT 9
BIT 10
BIT 11
BIT 12
BIT 13
BIT 14
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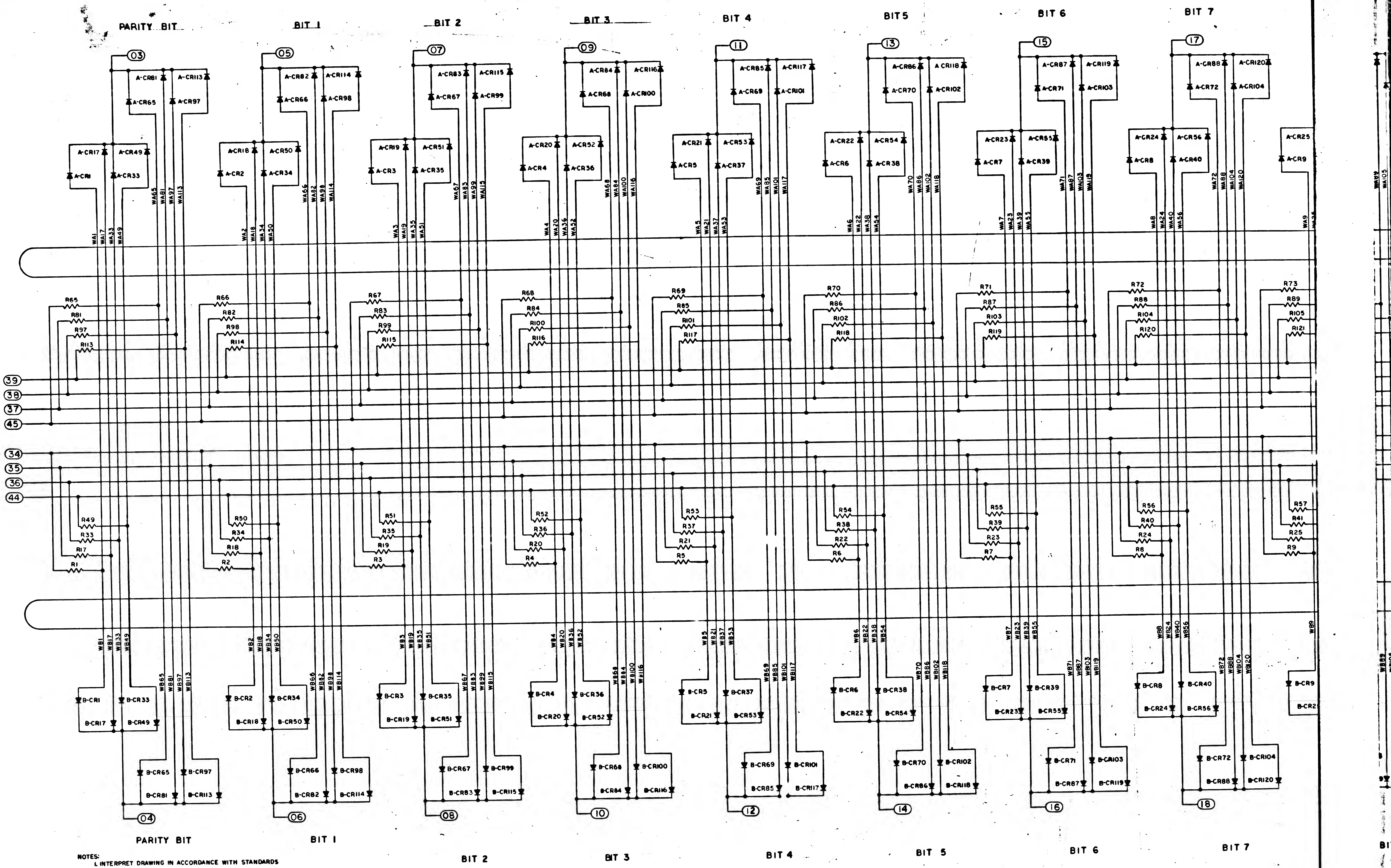
SIGN
9
5

SHEET 1



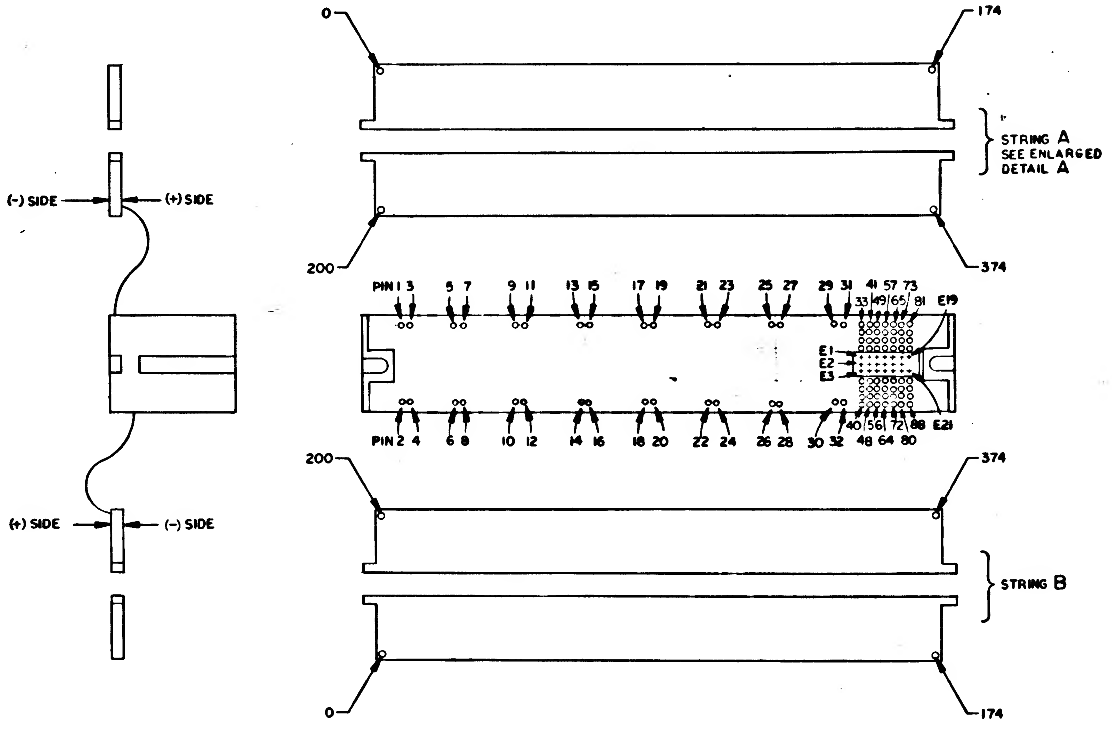
NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ~~512 CORES ARE THREADED OR BY PASSED WITH ENCLOSED LINES IN ACCORDANCE WITH ASSY SPEC~~
3. PREFIX LETTER OF REF DESIGNATIONS OF DIODES DENOTES STRING NUMBER
4. "BAR" WIRES DO NOT THREAD FIRST CORE AND DO THREAD LAST CORE
5. DIODES MUST BE MATCHED PAIRS
6. FOR INHIBIT WIRING THRU CORES - SEE SHEET 2
7. SENSE WIRING THRU CORESIN ACCORDANCE WITH APPLIABLE MODULE DECK

1006144 B E1/4

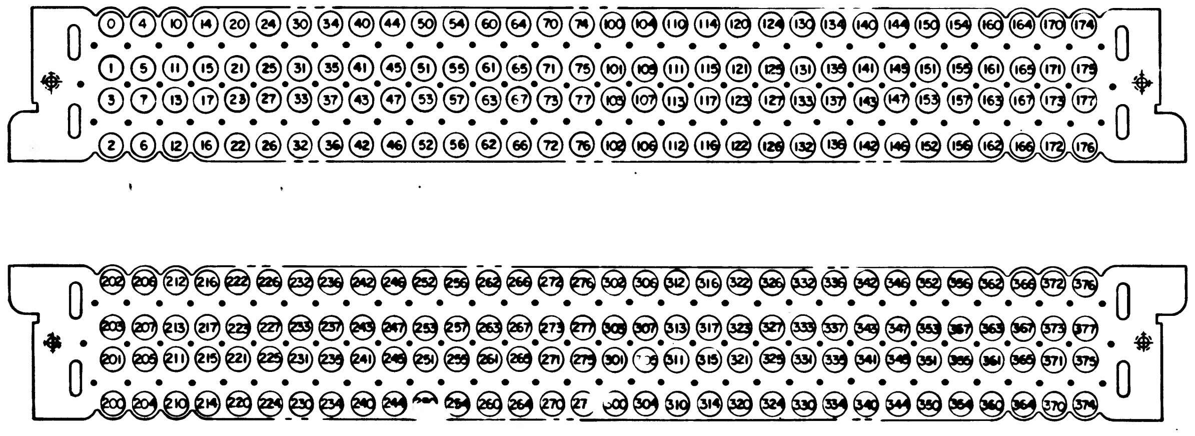
SHEET 1

1006144 B

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR 06751	3/3/64	
B	REVISED PER TDRR 13998 DR @ AM CHK	11/2/64	



0
174
STRING A
SEE ENLARGED DETAIL A
200
374
(-) SIDE
(+) SIDE
PIN 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 41 49 57 65 73 81
E19
E1
E2
E3
E21
PIN 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 40 48 56 64 72 80 88
200
374
(+) SIDE
(-) SIDE
STRING B
0
174



DETAIL A

REV A. THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

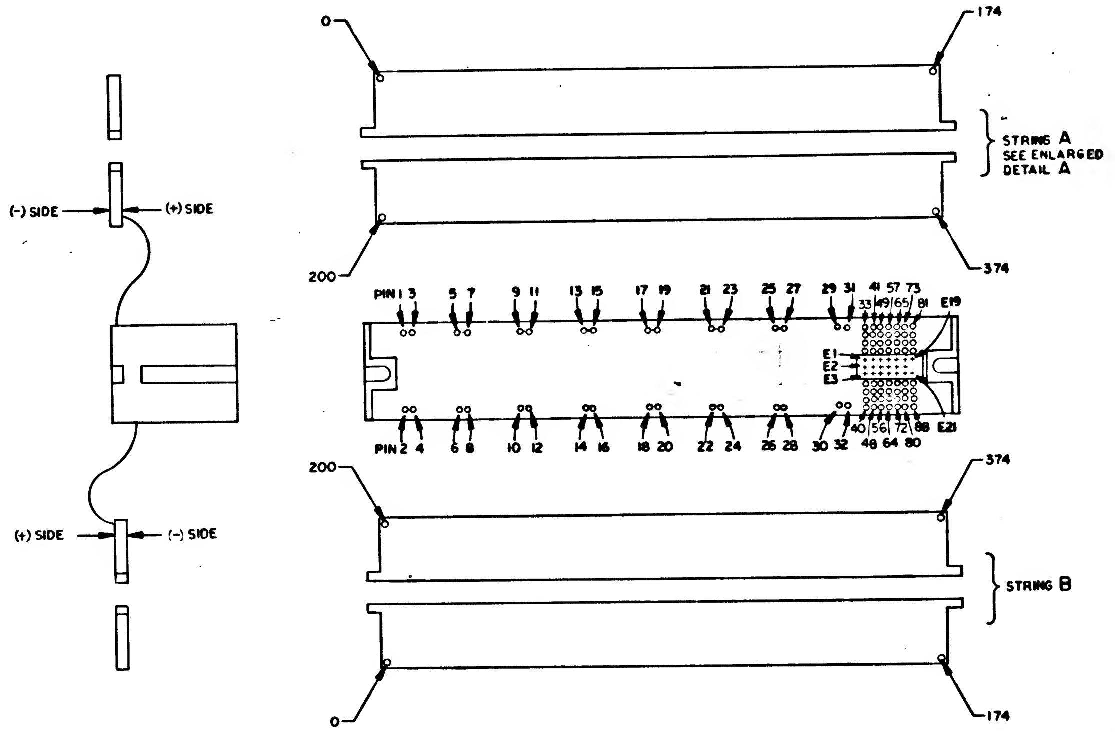
MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN DATE
CHECKED
APPROVAL
APPROVAL 17 Feb 64
NASA APPROVAL
MIT APPROVAL 20/64

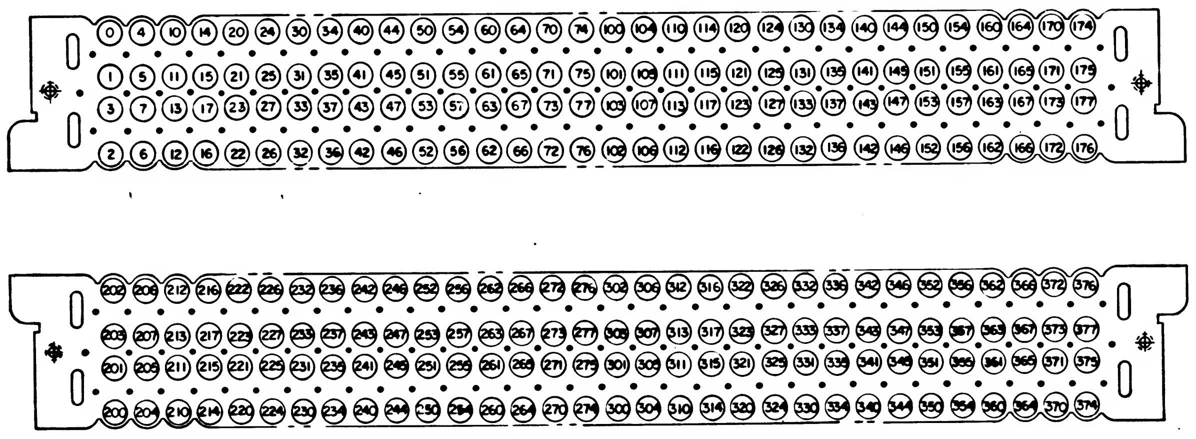
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE MODULE

CODE IDENT NO. —
SIZE J
NASA DRAWING NO. 1006144
SCALE NONE
WT
SHEET 2 OF 2

1006144 B





DETAIL A

REV A. THIS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

QTY REQD | PART OR IDENTIFYING

MIT
INSTRUMENTATION L
CAMBRIDGE, MASS

DRAWN
DATE
CHECKED
APPROVAL
APPROVAL Ellen Olson
NASA APPROVAL
MIT APPROVAL

SC
RO

ENTER CORES THRU
INDICATED SIDE

+242	-366	-164	-164	-160	+165	-164	-13	-10	-154	-160	-14	-4	-170	-150	-44	-4	-170	-70	-70	
-236	+370	+172	+374	+370	-371	+370	+207	+204	+374	+370	+210	+200	+374	+354	+240	+200	+374	+274	+274	
+232	-371	-173	-371	-375	+373	-372	-206	-205	-375	-371	-211	-201	-375	-355	-241	-201	-375	-275	-275	
-226	+373	+171	+377	+373	-173	+172	+ 6	+ 5	+377	+373	+213	+203	+377	+357	+243	+203	+377	+277	+277	
+222	-372	-170	-372	-376	+171	-170	- 7	- 4	-376	-372	-212	-202	-376	-356	-242	-202	-376	-276	-276	
-216	+374	+176	+176	+172	-375	+374	+203	+200	+176	+172	+ 12	+ 2	+176	+156	+ 42	+ 2	+176	+ 76	+ 76	
+212	-375	-177	-173	-177	+377	-376	-202	-201	-177	-173	- 13	- 3	-177	-157	- 43	- 3	-177	- 77	- 77	
-206	+377	+175	+175	+171	-177	+176	+ 2	+ 1	+175	+171	+ 11	+ 1	+175	+155	+ 41	+ 1	+175	+ 75	+ 75	
+202	-376	-174	-170	-174	+175	-174	- 3	- 0	-174	-170	- 10	- 0	-174	-154	- 40	- 0	-174	- 74	- 74	
+ 2																			+300	
- 6																			-301	
+ 12																			+303	
- 16																			-302	
+ 22																			+102	
- 26																			-103	
+ 32																			+101	
- 36																			-100	
+ 42																			+304	
- 46																			-305	
+ 52																			+307	
- 56																			-306	
+ 62																			+106	
- 66																			-107	
+ 72																			+105	
- 76																			-104	
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+ 71																			+145	
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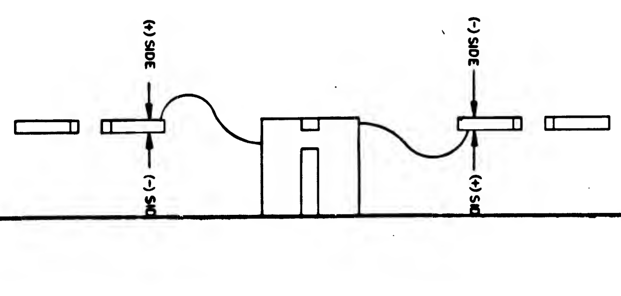
+ 20																			-376	
- 14																			+176	
+ 10																			-177	
- 4																			+175	
+ 0																			-174	
2 E18	87 82	77 76	79 E17	80 E16	69 E15	70 E14	71 E13	72 E12	61 E11	62 E10	63 E9	64 E8	53 E7	54 E6	55 E5	56 E4	46 E3	47 E2	48 E1	SOLDER TO PIN



D

C

B

A

INHIBIT WIRING TABLE

WIRE NO.	STRING		SOLDER TO PIN																
	A	B																	
129	☒ 	 ☒	41 E1	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4
130	☒ 	 ☒	42 E2	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4
131	☒ 	 ☒	43 E3	+300	-301	+303	-302	+102	-103	+101	-100	+304	-305	+307	-306	+106	-107	+105	-104
132	☒ 	 ☒	49 E4	+334	-335	+337	-336	+136	-137	+135	-134	+330	-331	+333	-332	+132	-133	+131	-130
133	☒ 	 ☒	50 E5	+374	-375	+377	-376	+176	-177	+175	-174	+370	-371	+373	-372	+172	-173	+171	-170
134	☒ 	 ☒	51 E6	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4
135	☒ 	 ☒	52 E7	+220	-221	+223	-222	+22	-23	+21	-20	+224	-225	+227	-226	+26	-27	+25	-24
136	☒ 	 ☒	57 E8	+364	-365	+367	-366	+166	-167	+165	-164	+360	-361	+363	-362	+162	-163	+161	-160
137	☒ 	 ☒	58 E9	+374	-375	+377	-376	+176	-177	+175	-174	+370	-371	+373	-372	+172	-173	+171	-170
138	☒ 	 ☒	59 E10	+200	-201	+203	-202	+2	-3	+1	-0	+210	-211	+213	-212	+12	-13	+11	-10
139	☒ 	 ☒	60 E11	+204	-205	+207	-206	+6	-7	+5	-4	+214	-215	+217	-216	+16	-17	+15	-14
140	☒ 	 ☒	65 E12	+374	-375	+175	-174	+370	-371	+171	-170	+364	-365	+165	-164	+360	-361	+161	-160
141	☒ 	 ☒	66 E13	+377	-376	+176	-177	+373	-372	+172	-173	+367	-366	+166	-167	+363	-362	+162	-163
142	☒ 	 ☒	67 E14	+200	-202	+2	-0	+204	-206	+6	-4	+210	-212	+12	-10	+214	-216	+16	-14
143	☒ 	 ☒	68 E15	-201	+203	-3	+1	-205	+207	-7	+5	-211	+213	-13	+11	-215	+217	-17	+15
144	☒ 	 ☒	73 E16	+200	-205	+203	-206	+2	-7	+1	-4	+214	-211	+217	-212	+16	-13	+15	-10
145	☒ 	 ☒	74 E17	+204	-201	+207	-202	+6	-3	+5	-0	+210	-215	+213	-216	+12	-17	+11	-14
146	☒ 	 ☒	75 78	+2	-3	+1	-0	+6	-7	+5	-4	+12	-13	+11	-10	+16	-17	+15	-14
147	☒ 	 ☒	81 88	+200	-201	+203	-202	+204	-205	+207	-206	+210	-211	+213	-212	+214	-215	+217	-216
148	☒ 	 ☒	1 E18	+200	-204	+210	-214	+220	-224	+230	-234	+240	-244	+250	-254	+260	-264	+270	-274

WIRE NO.																
129	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17	+15	-14
130	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17	+15	-14
131	+310	-311	+313	-312	+112	-113	+111	-110	+314	-315	+317	-316	+116	-117	+115	-114
132	+324	-325	+327	-326	+126	-127	+125	-124	+320	-321	+323	-322	+122	-123	+121	-120
133	+364	-365	+367	-366	+166	-167	+165	-164	+360	-361	+363	-362	+162	-163	+161	-160
134	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17	+15	-14
135	+230	-231	+233	-232	+32	-33	+31	-30	+234	-235	+237	-236	+36	-37	+35	-34
136	+344	-345	+347	-346	+146	-147	+145	-144	+340	-341	+343	-342	+142	-143	+141	-140
137	+354	-355	+357	-356	+156	-157	+155	-154	+350	-351	+353	-352	+152	-153	+151	-150
138	+220	-221	+223	-222	+22	-23	+21	-20	+230	-231	+233	-232	+32	-33	+31	-30
139	+224	-225	+227	-226	+26	-27	+25	-24	+234	-235	+237	-236	+36	-37	+35	-34
140	+354	-355	+155	-154	+350	-351	+151	-150	+344	-345	+145	-144	+340	-341	+141	-140
141	+357	-356	+156	-157	+353	-352	+152	-153	+347	-346	+146	-147	+343	-342	+142	-143
142	+220	-222	+22	-20	+224	-226	+26	-24	+230	-232	+32	-30	+234	-236	+36	-34
143	-221	+223	-23	+21	-225	+227	-27	+25	-231	+233	-33	+31	-235	+237	-37	+35
144	+224	-221	+227	-222	+26	-23	+25	-20	+230	-235	+233	-236	+32	-37	+31	-34
145	+220	-225	+223	-226	+22	-27	+21	-24	+234	-231	+237	-232	+36	-33	+35	-30
146	+22	-23	+21	-20	+26	-27	+25	-24	+32	-33	+31	-30	+36	-37	+35	-34
147	+220	-221	+223	-222	+224	-225	+227	-226	+230	-231	+233	-232	+234	-235	+237	-236
148	+300	-304	+310	-314	+320	-324	+330	-334	+340	-344	+350	-354	+360	-364	+370	-374

WIRE NO.																
129	+220	-221	+223	-222	+22	-23	+21	-20	+224	-225	+227	-226	+26	-27	+25	-24
130	+220	-221	+223	-222	+22	-23	+21	-20	+224	-225	+227	-226	+26	-27	+25	-24
131	+320	-321	+323	-322	+122	-123	+121	-120	+324	-325	+327	-326	+126	-127	+125	-124
132	+314	-315	+317	-316	+116	-117	+115	-114	+310	-311	+313	-312	+112	-113	+111	-110
133	+354	-355	+357	-356	+156	-157	+155	-154	+350	-351	+353	-352	+152	-153	+151	-150
134	+240	-241	+243	-242	+42	-43	+41	-40	+244	-245	+247	-246	+46	-47	+45	-44
135	+260	-261	+263	-262	+62	-63	+61	-60	+264	-265	+267	-266	+66	-67	+65	-64
136	+324	-325	+327	-326	+126	-127	+125	-124	+320	-321	+323	-322	+122	-123	+121	-120
137	+334	-335	+337	-336	+136	-137	+135	-134	+330	-331	+333	-332	+132	-133	+131	-130
138	+240	-241	+243	-242	+42	-43	+41	-40	+250	-251	+253	-252	+52	-53	+51	-50
139	+244	-245	+247	-246	+46	-47	+45	-44	+254	-255	+257	-256	+56	-57	+55	-54
140	+334	-335	+135	-134	+330	-331	+131	-130	+324	-325	+125	-124	+320	-321	+121	-120
141	+337	-336	+136	-137	+333	-332	+132	-133	+327	-326	+126	-127	+323	-322	+122	-123
142	+240	-242	+42	-40	+244	-246	+46	-44	+250	-252	+52	-50	+254	-256	+56	-54
143	-241	+243	-43	+41	-245	+247	-47	+45	-251	+253	-53	+51	-255	+257	-57	+55
144	+244	-241	+247	-242	+46	-43	+45	-40	+250	-255	+253	-256	+52	-57	+51	-54
145	+240	-245	+243	-246	+42	-47	+41	-44	+254	-251	+257	-252	+56	-53	+55	-50
146	+42	-43	+41	-40	+46	-47	+45	-44	+52	-53	+51	-50	+56	-57	+55	-54
147	+240	-241	+243	-242	+244	-245	+247	-246	+250	-251	+253	-252	+254	-255	+257	-256
148	-375	+371	-365	+361	-355	+351	-345	+341	-335	+331	-325	+321	-315	+311	-305	+301

WIRE NO.																
129	+230	-231	+233	-232	+32	-33	+31	-30	+234	-235	+237	-236	+36	-37	+35	-34
130	+230	-231	+233	-232	+32	-33	+31	-30	+234	-235	+237	-236	+36	-37	+35	-34
131	+330	-331	+333	-332	+132	-133	+131	-130	+334	-335	+337	-336	+136	-137	+135	-134
132	+304	-305	+307	-306	+106	-107	+105	-104	+300	-301	+303	-302	+102	-103	+101	-100
133	+344	-345	+347	-346	+146	-147	+145	-144	+340	-341	+343	-342	+142	-143	+141	-140
134	+250	-251	+253	-252	+52	-53	+51	-50	+254	-255	+257	-256	+56	-57	+55	-54
135	+270	-271	+273	-272	+72	-73	+71	-70	+274	-275	+277	-276	+76	-77	+75	-74
136	+304	-305	+307	-306	+106	-107	+105	-104	+300	-301	+303	-302	+102	-103	+101	-100
137	+314	-315	+317	-316	+116	-117	+115	-114	+310	-311	+313	-312	+112	-113	+111	-110
138	+260	-261	+263	-262	+62	-63	+61	-60	+270	-271	+273	-272	+72	-73	+71	-70
139	+264	-265	+267	-266	+66	-67	+65	-64	+274	-275	+277	-276	+76	-77	+75	-74
140	+314	-315	+115	-114	+310	-311	+111	-110	+304	-305	+105	-104	+300	-301	+101	-100
141	+317	-316	+116	-117	+313	-312	+112	-113	+307	-306	+106	-107	+303	-302	+102	-103
142	+260	-262	+62	-60	+264	-266	+66	-64	+270	-272	+72	-70	+274	-276	+76	-74
143	-261	+263	-63	+61	-265	+267	-67	+65	-271	+272	-72	+71	-275	+277	-77	+75
144	+260	-265	+263	-266	+62	-67	+61	-64	+274	-271	+277	-272	+76	-73	+75	-70
145	+264	-261	+267	-262	+66	-63	+65	-60	+270	-275	+273	-276	+72	-77	+71	-74
146	+62	-63	+61	-60	+66	-67	+65	-64	+72	-73	+71	-70	+76	-77	+75	-74
147	+260	-261	+263	-262	+264	-265	+267	-266	+270	-271	+273	-272	+274	-275	+277	-276
148	-275	+271	-265	+261	-255	+251	-245	+241	-235	+231	-225	+221	-215	+211	-205	+201

WIRE NO.																
129	+240	-241	+243	-242	+42	-43	+41	-40	+244	-245	+247	-246	+46	-47	+45	-44
130	+240	-241	+243	-242	+42	-43	+41	-40	+244	-245	+247	-246	+46	-47	+45	-44
131	+340	-341	+343	-342	+142	-143	+141	-140	+344	-345	+347	-346	+146	-147	+145	-144
132	+234	-235	+237	-236	+36	-37	+35	-34	+230	-231	+233	-232	+32	-33	+31	-30
133	+274	-275	+277	-276	+76	-77	+75	-74	+270	-271	+273	-272	+72	-73	+71	-70
134	+300	-301	+303	-302	+102	-103	+101	-100	+304	-305	+307	-306	+106	-107	+105	-104
135	+320	-321	+323	-322	+122	-123	+121	-120	+324	-325	+327	-326	+126	-127	+125	-124
136	+264	-265	+267	-266	+66	-67	+65	-64	+260	-261	+263	-262	+62	-63	+61	-60
137	+274	-275	+277	-276	+76	-77	+75	-74	+270	-271	+273	-272	+72	-73	+71	-70
138	+300	-301	+303	-302	+102	-103	+101	-100	+310	-311	+313	-312	+112	-113	+111	-110
139	+304	-305	+307	-306	+106	-107	+105	-104	+314	-315	+317	-316	+116	-117	+115	-114
140	+274	-275	+75	-74	+270	-271	+71	-70	+264	-265	+65	-64	+260	-261	+61	-60
141	+277	-276	+76	-77	+273	-272	+72	-73	+267	-266	+66	-67	+263	-262	+62	-63
142	+300	-302	+102	-100	+304	-306	+106	-104	+310	-312	+112	-110	+314	-316	+116	-114
143	-301	+303	-103	+101	-305	+307	-107	+105	-311	+313	-113	+111	-315	+317	-117	+115
144	+304	-301	+307	-302	+106	-103	+105	-100	+310	-315	+313	-316	+112	-117	+111	-114
145	+300	-305	+303	-306	+102	-107	+101	-104	+314	-311	+317	-312	+116	-113	+115	-110
146	+102	-103	+101	-100	+106	-107	+105	-104	+112	-113	+111	-110	+116	-117	+115	-114
147	+300	-301	+303	-302	+304	-305	+307	-306	+310	-311	+313	-312	+314	-315	+317	-316
148	+203	-207	+213	-217	+223	-227	+233	-237	+243	-247	+253	-257	+263	-267	+273	-277

WIRE NO.																
129	+250	-251	+253	-252	+52	-53	+51	-50	+254	-255	+257	-256	+56	-57	+55	-54
130	+250	-251	+253	-252	+52	-53	+51	-50	+254	-255	+257	-256	+56	-57	+55	-54
131	+350	-351	+353	-352	+152	-153	+151	-150	+354	-355	+357	-356	+156	-157	+155	-154
132	+224	-225	+227	-226	+26	-27	+25	-24	+220	-221	+223	-222	+22	-23	+21	-20
133	+264	-265	+267	-266	+66	-67	+65	-64	+260	-261	+263	-262	+62	-63	+61	-60
134	+310	-311	+313	-312	+112	-113	+111	-110	+314	-315	+317	-316	+116	-117	+115	-114
135	+330	-331	+333	-332	+132	-133	+131	-130	+334	-335	+337	-336	+136	-137	+135	-134
136	+244	-245	+247	-246	+46	-47	+45	-44	+240	-241	+243	-242	+42	-43	+41	-40
137	+254	-255	+257	-256	+56	-57	+55	-54	+250	-251	+253	-252	+52	-53	+51	-50
138	+320	-321	+323	-322	+122	-123	+121	-120	+330	-331	+333	-332	+132	-133	+131	-130
139	+324	-325	+327	-326	+126	-127	+125	-124	+334	-335	+337	-336	+136	-137	+135	-134
140	+254	-255	+55	-54	+250	-251	+51	-50	+244	-245	+45	-44	+240	-241	+41	-40
141	+257	-256	+56	-57	+253	-252	+52	-53	+247	-246	+46	-47	+243	-242	+42	-43
142	+320	-322	+122	-120	+324	-326	+126	-124	+330	-332	+132	-130	+334	-336	+136	-134
143	-321	+323	-123	+121	-325	+327	-127	+125	-331	+333	-133	+131	-335	+337	-137	+135
144	+320	-325	+323	-326	+122	-127	+121	-124	+334	-331	+337	-332	+136	-133	+135	-130
145	+324	-321	+327	-322	+126	-123	+125	-120	+330	-335	+333	-336	+132	-137	+131	-134
146	+122	-123	+121	-120	+126	-127	+125	-124	+132	-133	+131	-130	+136	-137	+135	-134
147	+320	-321	+323	-322	+324	-325	+327	-326	+330	-331	+333	-332	+334	-335	+337	-336
148	+303	-307	+313	-317	+323	-327	+333	-337	+343	-347	+353	-357	+363	-367	+373	-377

WIRE NO.																
129	+260	-261	+263	-262	+62	-63	+61	-60	+264	-265	+267	-266	+66	-67	+65	-64
130	+260	-261	+263	-262	+62	-63	+61	-60	+264	-265	+267	-266	+66	-67	+65	-64
131	+360	-361	+363	-362	+162	-163	+161	-160	+364	-365	+367	-366	+166	-167	+165	-164
132	+214	-215	+217	-216	+16	-17	+15	-14	+210	-211	+213	-212	+12	-13	+11	-10
133	+254	-255	+257	-256	+56	-57	+55	-54	+250	-251	+253	-252	+52	-53	+51	-50
134	+340	-341	+343	-342	+142	-143	+141	-140	+344	-345	+347	-346	+146	-147	+145	-144
135	+360	-361	+363	-362	+162	-163	+161	-160	+364	-365	+367	-366	+166	-167	+165	-164
136	+224	-225	+227	-226	+26	-27	+25	-24	+220	-221	+223	-222	+22	-23	+21	-20
137	+234	-235	+237	-236	+36	-37	+35	-34	+230	-231	+233	-232	+32	-33	+31	-30
138	+340	-341	+343	-342	+142	-143	+141	-140	+350	-351	+353	-352	+152	-153	+151	-150
139	+344	-345	+347	-346	+146	-147	+145	-144	+354	-355	+357	-356	+156	-157	+155	-154
140	+234	-235	+35	-34	+230	-231	+31	-30	+224	-225	+25	-24	+220	-221	+21	-20
141	+237	-236	+36	-37	+233	-232	+32	-33	+227	-226	+26	-27	+223	-222	+22	-23
142	+340	-342	+142	-140	+344	-346	+146	-144	+350	-352	+152	-150	+354	-356	+156	-154
143	-341	+343	-143	+141	-345	+347	-147	+145	-351	+353	-153	+151	-355	+357	-157	+155
144	+340	-345	+343	-346	+142	-147	+141	-144	+354	-351	+357	-352	+156	-153	+155	-150
145	+344	-341	+347	-342	+146	-143	+145	-140	+350	-355	+353	-356	+152	-157	+151	-154
146	+142	-143	+141	-140	+146	-147	+145	-144	+152	-153	+151	-150	+156	-157	+155	-154
147	+340	-341	+343	-342	+344	-345	+347	-346	+350	-351	+353	-352	+354	-355	+357	-356
148	-376	+372	-366	+362	-356	+352	-346	+342	-336	+332	-326	+322	-316	+312	-306	+302

WIRE NO.																
129	+270	-271	+273	-272	+72	-73	+71	-70	+274	-275	+277	-276	+76	-77	+75	-74
130	+270	-271	+273	-272	+72	-73	+71	-70	+274	-275	+277	-276	+76	-77	+75	-74
131	+370	-371	+373	-372	+172	-173	+171	-170	+374	-375	+377	-376	+176	-177	+175	-174
132	+204	-205	+207	-206	+6	-7	+5	-4	+200	-201	+203	-202	+2	-3	+1	-0
133	+244	-245	+247	-246	+46	-47	+45	-44	+240	-241	+243	-242	+42	-43	+41	-40
134	+350	-351	+353	-352	+152	-153	+151	-150	+354	-355	+357	-356	+156	-157	+155	-154
135	+370	-371	+373	-372	+172	-173	+171	-170	+374	-375	+377	-376	+176	-177	+175	-174
136	+204	-205	+207	-206	+6	-7	+5	-4	+200	-201	+203	-202	+2	-3	+1	-0
137	+214	-215	+217	-216	+16	-17	+15	-14	+210	-211	+213	-212	+12	-13	+11	-10
138	+360	-361	+363	-362	+162	-163	+161	-160	+370	-371	+373	-372	+172	-173	+171	-170
139	+364	-365	+367	-366	+166	-167	+165	-164	+374	-375	+377	-376	+176	-177	+175	-174
140	+214	-215	+15	-14	+210	-211	+11	-10	+204	-205	+5	-4	+200	-201	+1	-0
141	+217	-216	+16	-17	+213	-212	+12	-13	+207	-206	+6	-7	+203	-202	+2	-3
142	+360	-362	+162	-160	+364	-366	+166	-164	+370	-372	+172	-170	+374	-376	+176	-174
143	-361	+363	-163	+161	-365	+367	-167	+165	-371	+373	-173	+171	-375	+377	-177	+175
144	+364	-361	+367	-362	+166	-163	+165	-160	+370	-375	+373	-376	+172	-177	+171	-174
145	+360	-365	+363	-366	+162	-167	+161	-164	+374	-371	+377	-372	+176	-173	+175	-170
146	+162	-163	+161	-160	+166	-167	+165	-164	+172	-173	+171	-170	+176	-177	+175	-174
147	+360	-361	+363	-362	+364	-365	+367	-366	+370	-371	+373	-372	+374	-375	+377	-376
148	-276	+272	-266	+262	-256	+252	-246	+242	-236	+232	-226	+222	-216	+212	-206	+202

WIRE NO.	ENTER CORES THRU INDICATED SIDE																						
129	+30	-30	+30	-30	+10	-103	+101	-10	+30	-30	+30	-30	+10	-10	+10	-10	+310	-311	+313	-312	+112	-113	+11
130																							
131																							
132																							
133																							
134																							
135																							
136																							
137																							
138																							
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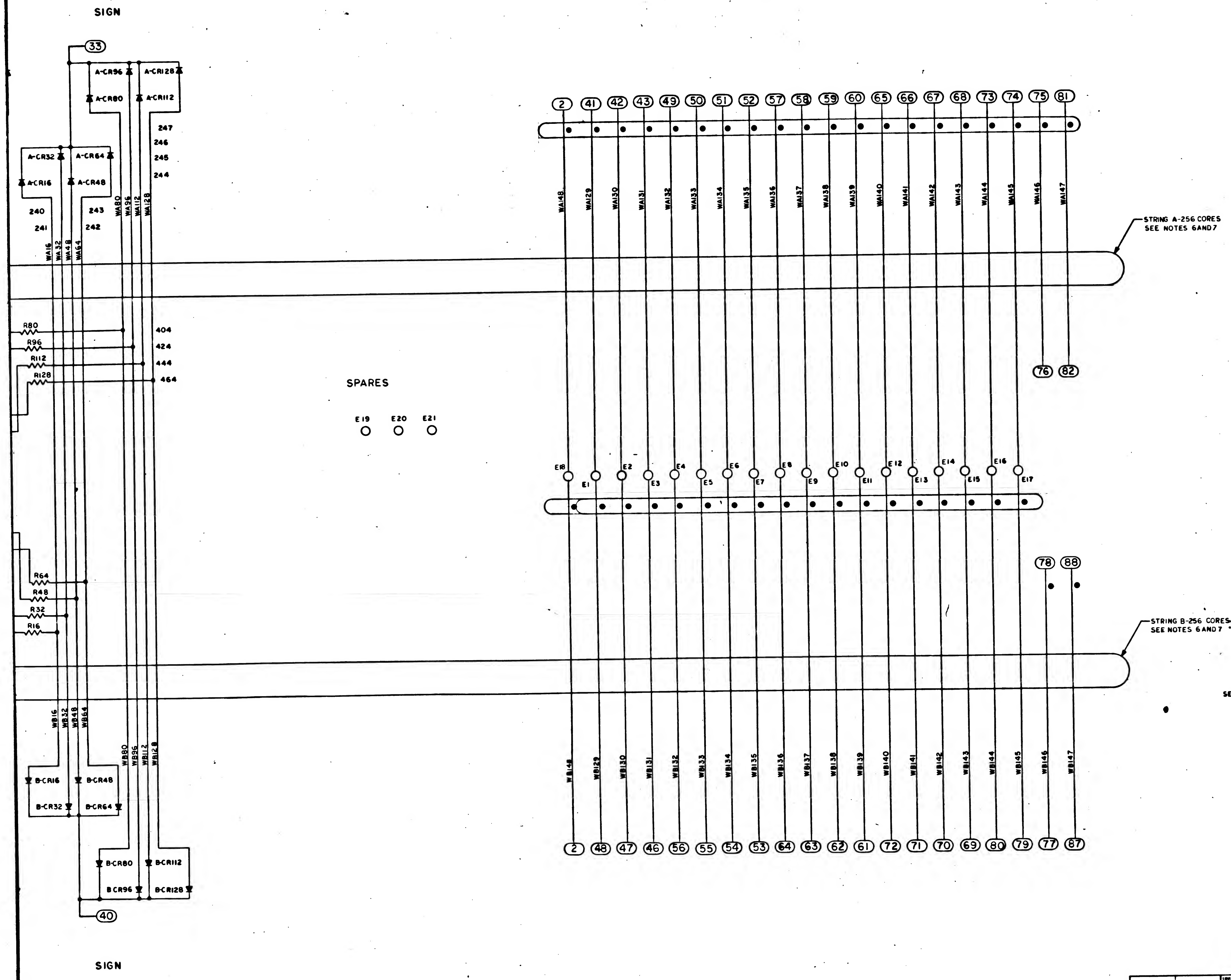
140																							
141																							
142																							
143																							
144																							
145																							
146																							
147																							
148	+2	-6	+12	-16	+22	-26	+32	-36	+42	-46	+52	-56	+62	-66	+72	-76	+102	-106	+112	-116	+122	-126	+132

1006144 B

C 1006144

SYM	DESCRIPTION	DATE	APPROVED
A	REVISED PER TDRR 06751		
B	REVISED PER TDRR 13998 DR CHK	12/2/64	
C	REVISED PER TDRR 17468 DR CHK	4/3/65	



WIRE ASSIGNMENT TABLE

WIRE DESIGNATION	FUNCTION SIGN					
	STICK 1 OF ROPE			STICK 2 OF ROPE		
	R	S	T	R	S	T
WA1 – WA16	SS00	SS20	SS40	SS10	SS30	SS50
WA17 – WA32	SS01	SS21	SS41	SS11	SS31	SS51
WA33 – WA48	SS02	SS22	SS42	SS12	SS32	SS52
WA49 – WA64	SS03	SS23	SS43	SS13	SS33	SS53
WB1 – WB16	SS04	SS24	SS44	SS14	SS34	SS54
WB17 – WB32	SS05	SS25	SS45	SS15	SS35	SS55
WB33 – WB48	SS06	SS26	SS46	SS16	SS36	SS56
WB49 – WB64	SS07	SS27	SS47	SS17	SS37	SS57
WA65 – WA80	SS100	SS120	SS140	SS110	SS130	SS150
WA81 – WA96	SS101	SS121	SS141	SS111	SS131	SS151
WA97 – WA112	SS102	SS122	SS142	SS112	SS132	SS152
WA113 – WA128	SS103	SS123	SS143	SS113	SS133	SS153
WB65 – WB80	SS104	SS124	SS144	SS114	SS134	SS154
WB81 – WB96	SS105	SS125	SS145	SS115	SS135	SS155
WB97 – WB112	SS106	SS126	SS146	SS116	SS136	SS156
WB113 – WB128	SS107	SS127	SS147	SS117	SS137	SS157
WA & WB129	RESET			RESET		
WA & WB130	7			7		
WA & WB131	$\overline{7}$			$\overline{7}$		
WA & WB132	6			6		
WA & WB133	$\overline{6}$			$\overline{6}$		
WA & WB134	5			5		
WA & WB135	$\overline{5}$			$\overline{5}$		
WA & WB136	4			4		
WA & WB137	$\overline{4}$			$\overline{4}$		
WA & WB138	3			3		
WA & WB139	$\overline{3}$			$\overline{3}$		
WA & WB140	2			2		
WA & WB141	$\overline{2}$			$\overline{2}$		
WA & WB142	1			1		
WA & WB143	$\overline{1}$			$\overline{1}$		
WA & WB144	P			P		
WA & WB145	$\overline{P}$			$\overline{P}$		
WA146	SET A			SET A		
WB146	SET C			SET C		
WA147	SET B			SET B		
WB147	SET D			SET D		
WB148	TEST LINE			TEST LINE		

SEE NOTE 4

SEE NOTES 5 →

PART NO	DESCRIPTION	VALUE	TOL	RATING	QTY
1006750-39	RESISTOR	2000	±5%	1/4W	128
1006751	DIODE				256
1006773-	CORE				512

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

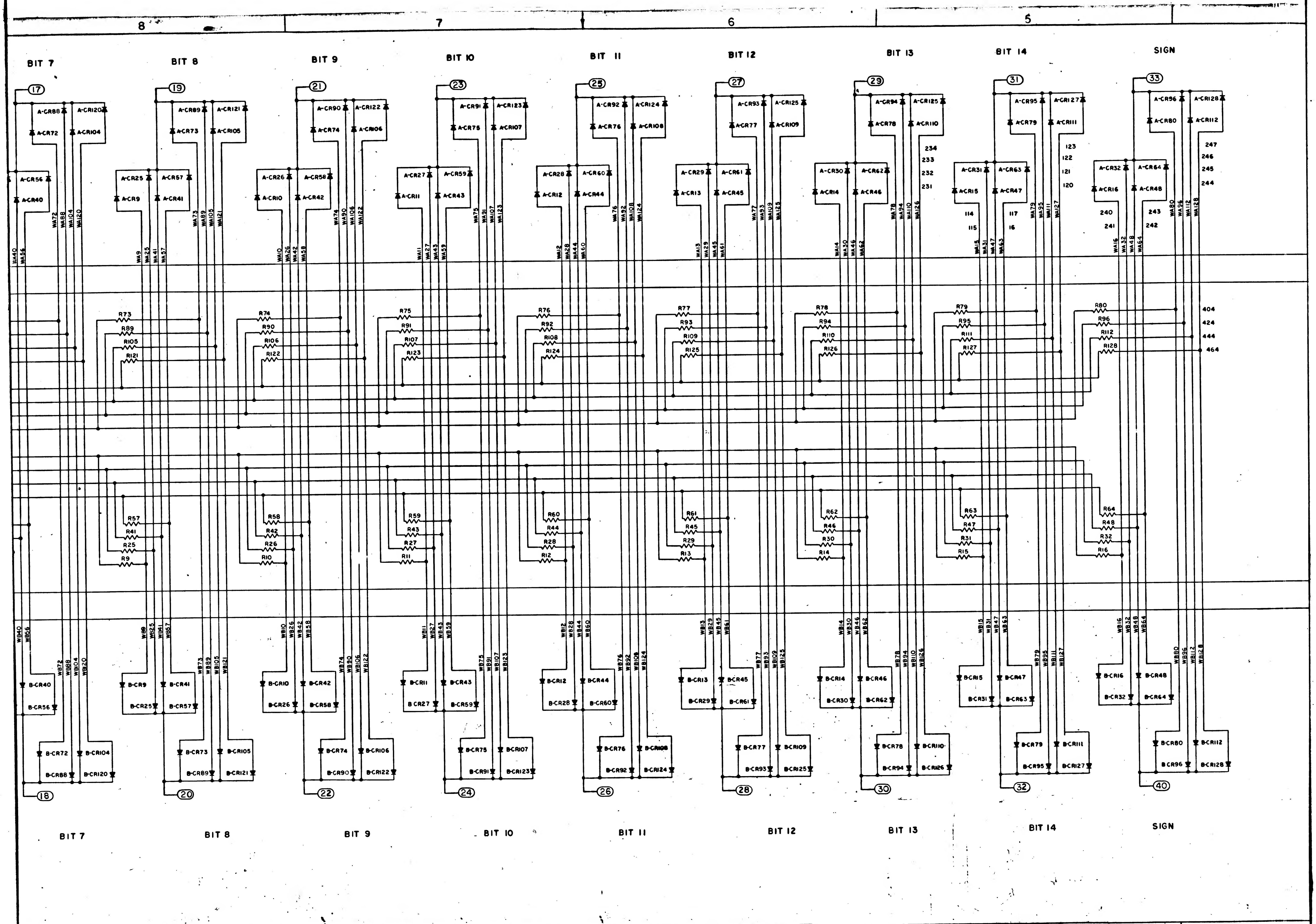
MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN DATE 7/29/63
CHECKED
APPROVAL 9-19
APPROVAL Eldon C. Hall 19 Aug 63
NASA APPROVAL 9-19-63
MIT APPROVAL 19 Aug 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

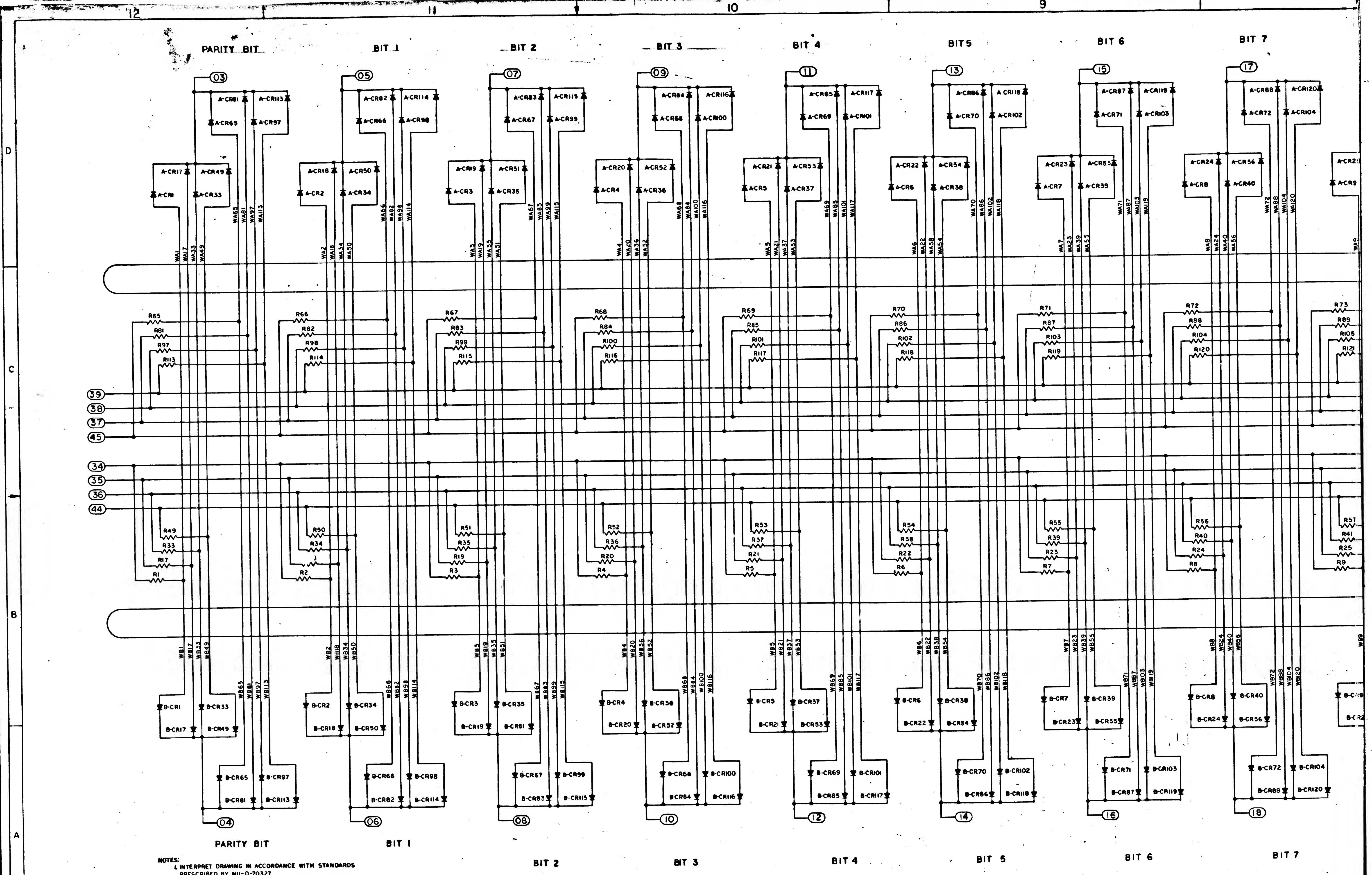
SCHEMATIC
ROPE MODULE

CODE IDENT NO. —
SIZE J
NASA DRAWING NO. 1006144
SCALE #
WT
SHEET 1 OF 1

1006144 C

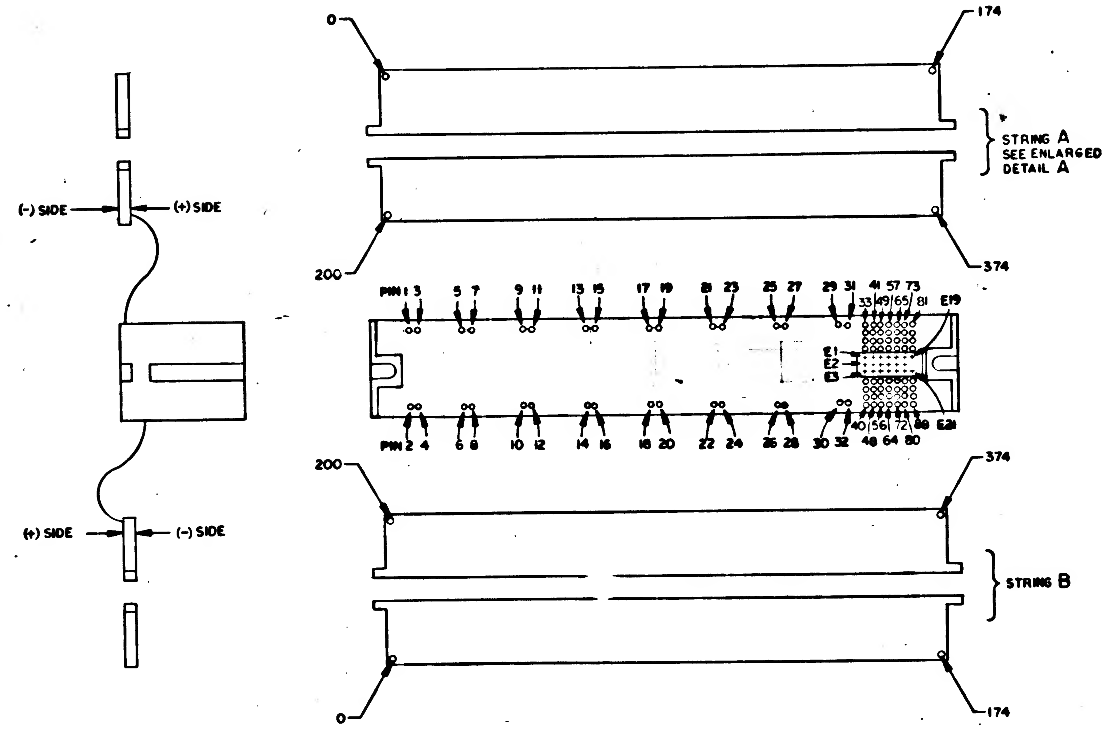


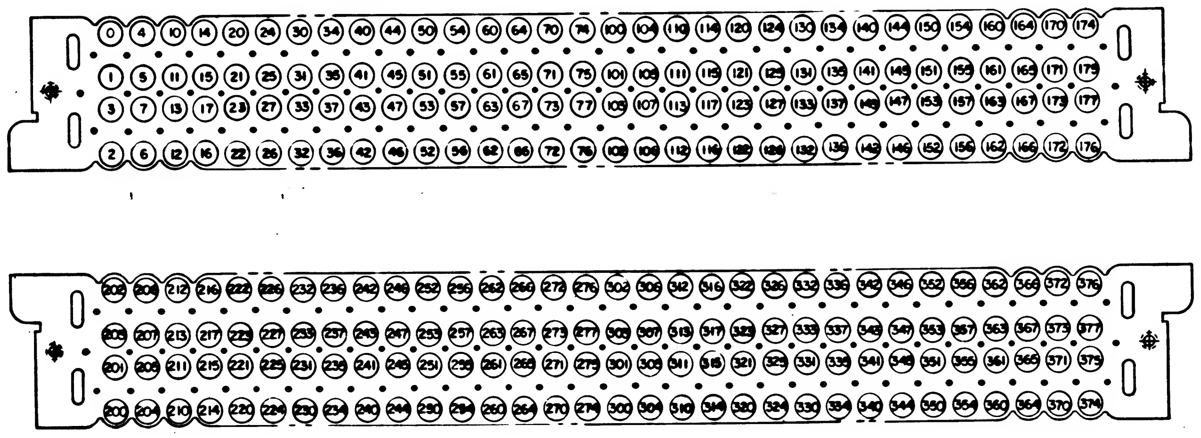
1006144 C E 2/3



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ~~512 CORES ARE THREADED OR BY PASSED WITH ENCLOSED LINES IN ACCORDANCE WITH ASSY SPEC~~
3. PREFIX LETTER OF REF DESIGNATIONS OF DIODES DENOTES STRING NUMBER
4. 'BAR' WIRES DO NOT THREAD FIRST CORE AND DO THREAD LAST CORE
5. DIODES MUST BE MATCHED PAIRS
6. FOR INHIBIT WIRING THRU CORES - SEE 1003821
7. SENSE WIRING THRU CORESIN ACCORDANCE WITH APPLIABLE MODULE DECK

SYM	DESCRIPTION	DATE	APPROVAL
A	THIS SHEET ADDED PER TDRR 06751	7/3/64	
B	REVISED PER TDRR 13998 DR CHK	12/3/64	
C	OBSOLETED PER TDRR 17468 DR CHK	6/6/65	





DETAIL A

REV C OBSOLETE

REV A. THIS SHEET ADDED

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

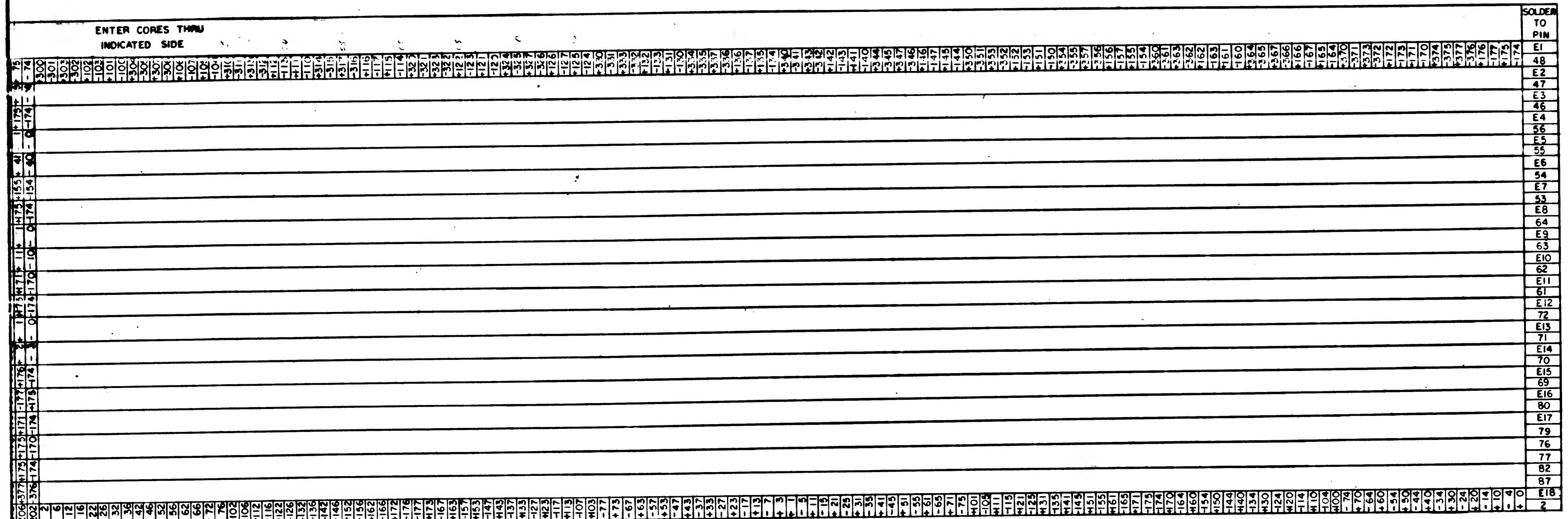
LIST OF MATERIALS

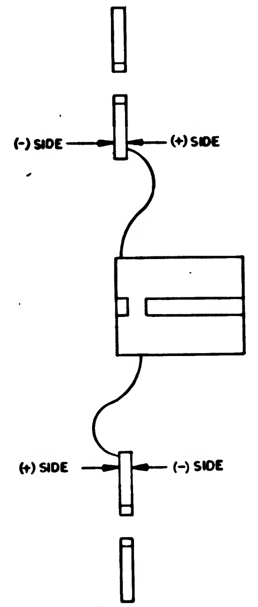
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON FRACTIONS ± DECIMALS ± ANGLES ±	MIT INSTRUMENTATION LAB CAMBRIDGE MASS
DO NOT SCALE THIS DRAWING	DRAWN DATE
MATERIAL	CHECKED 21 Jan 64
HEAT TREATMENT	APPROVAL
FINAL FINISH	APPROVAL 17 Feb 64
NEXT ASSY / USED ON	NASA APPROVAL
APPLICATION	MIT APPROVAL 2/21/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC
ROPE MODULE

CODE IDENT NO.	SIZE	NASA DRAWING NO.
	J	1006144
SCALE NONE	WT	SHEET 2 OF 2





144 C

1006144 C

SHEET 2

D

C

B

A

INHIBIT WIRING TABLE

WIRE NO.	STRING A	STRING B	SOLDER TO PIN																														
129	☒	☒	41 E1	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17
130	☒	☒	42 E2	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17
131	☒	☒	43 E3	+300	-301	+303	-302	+102	-103	+101	-100	+304	-305	+307	-306	+106	-107	+105	-104	+310	-311	+313	-312	+112	-113	+111	-110	+314	-315	+317	-316	+116	-117
132	☒	☒	49 E4	+33	-33	+33	-33	+13	-13	+13	-13	+33	-33	+33	-33	+13	-13	+13	-13	+32	-32	+32	-32	+12	-12	+12	-12	+32	-32	+32	-32	+12	-12
133	☒	☒	50 E5	+374	-375	+377	-376	+176	-177	+175	-174	+370	-371	+373	-372	+172	-173	+171	-170	+364	-365	+367	-366	+166	-167	+165	-164	+360	-361	+363	-362	+162	-163
134	☒	☒	51 E6	+200	-201	+203	-202	+2	-3	+1	-0	+204	-205	+207	-206	+6	-7	+5	-4	+210	-211	+213	-212	+12	-13	+11	-10	+214	-215	+217	-216	+16	-17
135	☒	☒	52 E7	+220	-221	+223	-222	+22	-23	+21	-20	+224	-225	+227	-226	+26	-27	+25	-24	+230	-231	+233	-232	+32	-33	+31	-30	+234	-235	+237	-236	+36	-37
136	☒	☒	57 E8	+364	-365	+367	-366	+166	-167	+165	-164	+360	-361	+363	-362	+162	-163	+161	-160	+344	-345	+347	-346	+146	-147	+145	-144	+340	-341	+343	-342	+142	-143
137	☒	☒	58 E9	+374	-375	+377	-376	+176	-177	+175	-174	+370	-371	+373	-372	+172	-173	+171	-170	+354	-355	+357	-356	+156	-157	+155	-154	+350	-351	+353	-352	+152	-153
138	☒	☒	59 E10	+200	-201	+203	-202	+2	-3	+1	-0	+210	-211	+213	-212	+12	-13	+11	-10	+220	-221	+223	-222	+22	-23	+21	-20	+230	-231	+233	-232	+32	-33
139	☒	☒	60 E11	+204	-205	+207	-206	+6	-7	+5	-4	+214	-215	+217	-216	+16	-17	+15	-14	+224	-225	+227	-226	+26	-27	+25	-24	+234	-235	+237	-236	+36	-37
140	☒	☒	65 E12	+374	-375	+175	-174	+370	-371	+171	-170	+364	-365	+165	-164	+360	-361	[illegible]	-160	+354	-355	+155	-154	+350	-351	+151	-150	+344	-346	+145	-144	+340	[illegible]
141	☒	☒	66 E13	+377	-376	+176	-177	+373	-372	+172	-173	+367	[illegible]	+164	-167	+363	-362	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
142	☒	☒	67 E14	+200	-202	+2	-0	+204	-206	+6	-4	+210	-212	+12	-10	+214	-216	[illegible]	-14	+220	-222	+22	-20	+224	-226	+26	-24	+230	-232	+32	-30	+234	[illegible]
143	☒	☒	68 E15	201	+203	-3	+1	-205	+207	-7	+5	-211	+213	-13	+11	-215	+217	-17	+15	-221	+223	-23	+21	-225	+227	-27	+25	-231	+233	-33	+31	-235	[illegible]
144	☒	☒	73 E16	+200	-205	+203	-206	+2	-7	+1	-4	+214	-211	+217	-212	+16	-13	+15	-10	+224	-221	+227	-222	+26	-23	+25	-20	+230	-235	+233	-236	+32	[illegible]
145	☒	☒	74 E17	+204	-201	+207	-202	+6	-3	+5	-0	+210	-215	+213	-216	+12	-17	+11	-14	+220	-225	+223	-226	+22	-27	+21	-24	+234	-231	+237	-232	+36	[illegible]
146	☒	☒	75 78	+2	-3	+1	-0	+6	-7	+5	-4	+12	-13	+11	-10	+16	-17	+15	-14	+22	-23	+21	-20	+26	-27	+25	-24	+32	-33	+31	-30	+36	[illegible]
147	☒	☒	81 88	+200	-201	+203	-202	+204	-205	+207	-206	+210	-211	+213	-212	+214	-215	+217	-216	+220	-221	+223	-222	+224	-225	+227	-226	+230	-231	+233	-232	+234	[illegible]
148	☒	☒	1 E18	+200	-204	+210	-214	+220	-224	+230	-234	+240	-244	+250	-254	+260	-264	+270	-274	+300	-304	+310	-314	+320	-324	+330	-334	+340	-344	+350	-354	+360	[illegible]

ENTER CORES THRU INDICATED SIDE

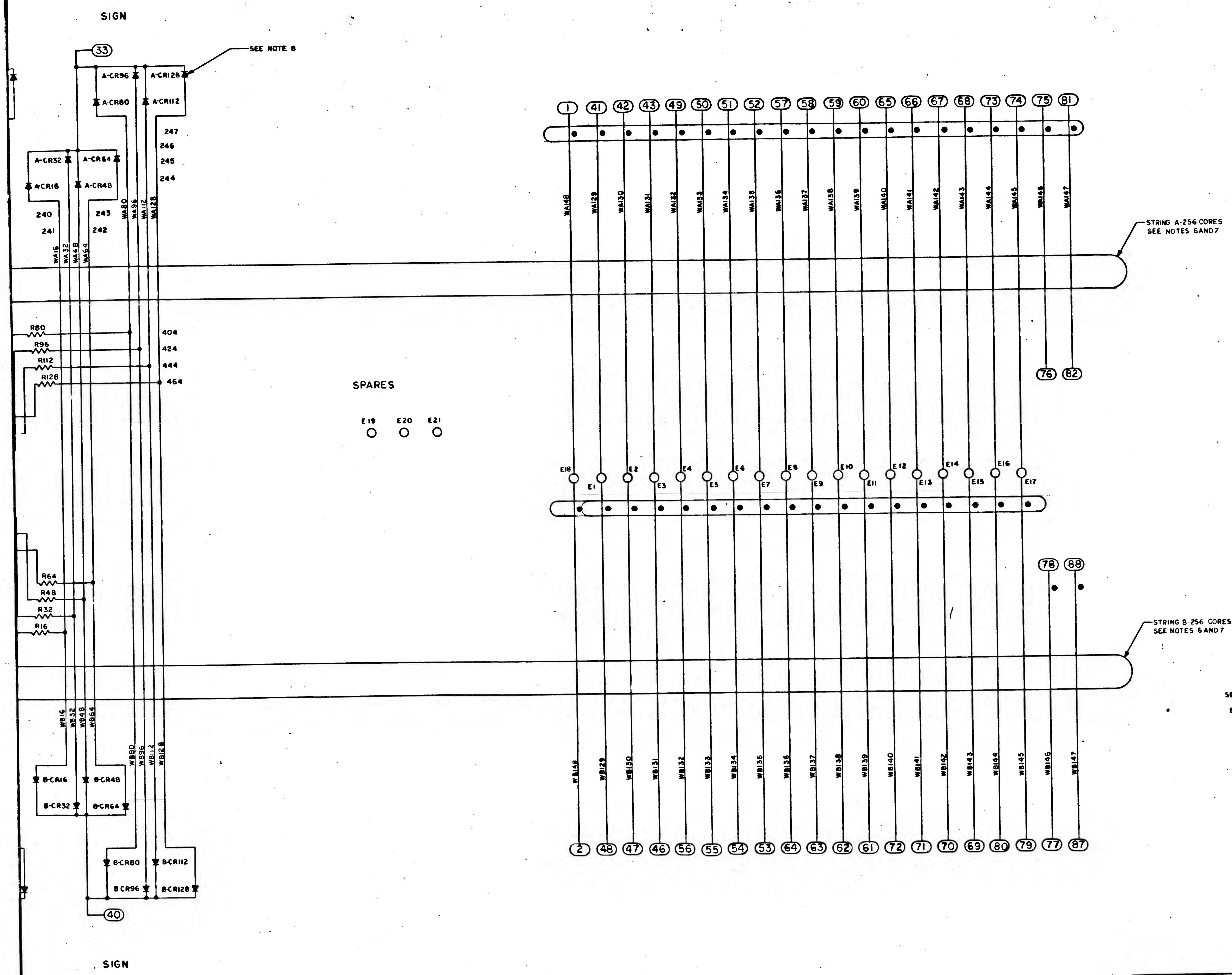
1006144	C

1006144 C

SHEET 2

D 1006144

	DESCRIPTION	DATE	APPROVED
A	REVISED PER TDRR 06751	3/3/64	
B	REVISED PER TDRR 13998 DR CHK	12/2/64	
C	REVISED PER TDRR 17468 DR CHK R.M.E.	6/3/65	
D	REVISED PER TDRR 20258 DR M. CHK R.M.E.	7/ /65	



WIRE ASSIGNMENT TABLE

WIRE DESIGNATION	FUNCTION SIGN					
	STICK 1 OF ROPE			STICK 2 OF ROPE		
	R	S	T	R	S	T
WA1 – WA16	SS00	SS20	SS40	SS10	SS30	SS50
WA17 – WA32	SS01	SS21	SS41	SS11	SS31	SS51
WA33 – WA48	SS02	SS22	SS42	SS12	SS32	SS52
WA49 – WA64	SS03	SS23	SS43	SS13	SS33	SS53
WB1 – WB16	SS04	SS24	SS44	SS14	SS34	SS54
WB17 – WB32	SS05	SS25	SS45	SS15	SS35	SS55
WB33 – WB48	SS06	SS26	SS46	SS16	SS36	SS56
WB49 – WB64	SS07	SS27	SS47	SS17	SS37	SS57
WA65 – WA80	SS100	SS120	SS140	SS110	SS130	SS150
WA81 – WA96	SS101	SS121	SS141	SS111	SS131	SS151
WA97 – WA112	SS102	SS122	SS142	SS112	SS132	SS152
WA113 – WA128	SS103	SS123	SS143	SS113	SS133	SS153
WB65 – WB80	SS104	SS124	SS144	SS114	SS134	SS154
WB81 – WB96	SS105	SS125	SS145	SS115	SS135	SS155
WB97 – WB112	SS106	SS126	SS146	SS116	SS136	SS156
WB113 – WB128	SS107	SS127	SS147	SS117	SS137	SS157
WA & WB129	RESET			RESET		
WA & WB130	7			7		
WA & WB131	$\overline{7}$			$\overline{7}$		
WA & WB132	6			6		
WA & WB133	$\overline{6}$			$\overline{6}$		
WA & WB134	5			5		
WA & WB135	$\overline{5}$			$\overline{5}$		
WA & WB136	4			4		
WA & WB137	$\overline{4}$			$\overline{4}$		
WA & WB138	3			3		
WA & WB139	$\overline{3}$			$\overline{3}$		
WA & WB140	2			2		
WA & WB141	$\overline{2}$			$\overline{2}$		
WA & WB142	1			1		
WA & WB143	$\overline{1}$			$\overline{1}$		
WA & WB144	P			P		
WA & WB145	$\overline{P}$			$\overline{P}$		
WA146	SET A			SET A		
WB146	SET C			SET C		
WA147	SET B			SET B		
WB147	SET D			SET D		
WB148	TEST LINE			TEST LINE		

SEE NOTE 4 (WA & WB129 – WB147)

PART NO	DESCRIPTION	VALUE	TOL	RATING	QTY
1006750-39	RESISTOR	2000	±5%	1/4 W	128
1006751	DIODE				256
1006320-001	CORE				512
1006298-1	CORE				512

SEE NOTE 5 → 1006751
SEE NOTE 9 (1006320-001, 1006298-1)

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN DATE 2/29/63
CHECKED
APPROVAL 9-19
APPROVAL Eldon C. Hall 19 Aug 63
NASA APPROVAL W. G. 9-19-63
MIT APPROVAL 9/19/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

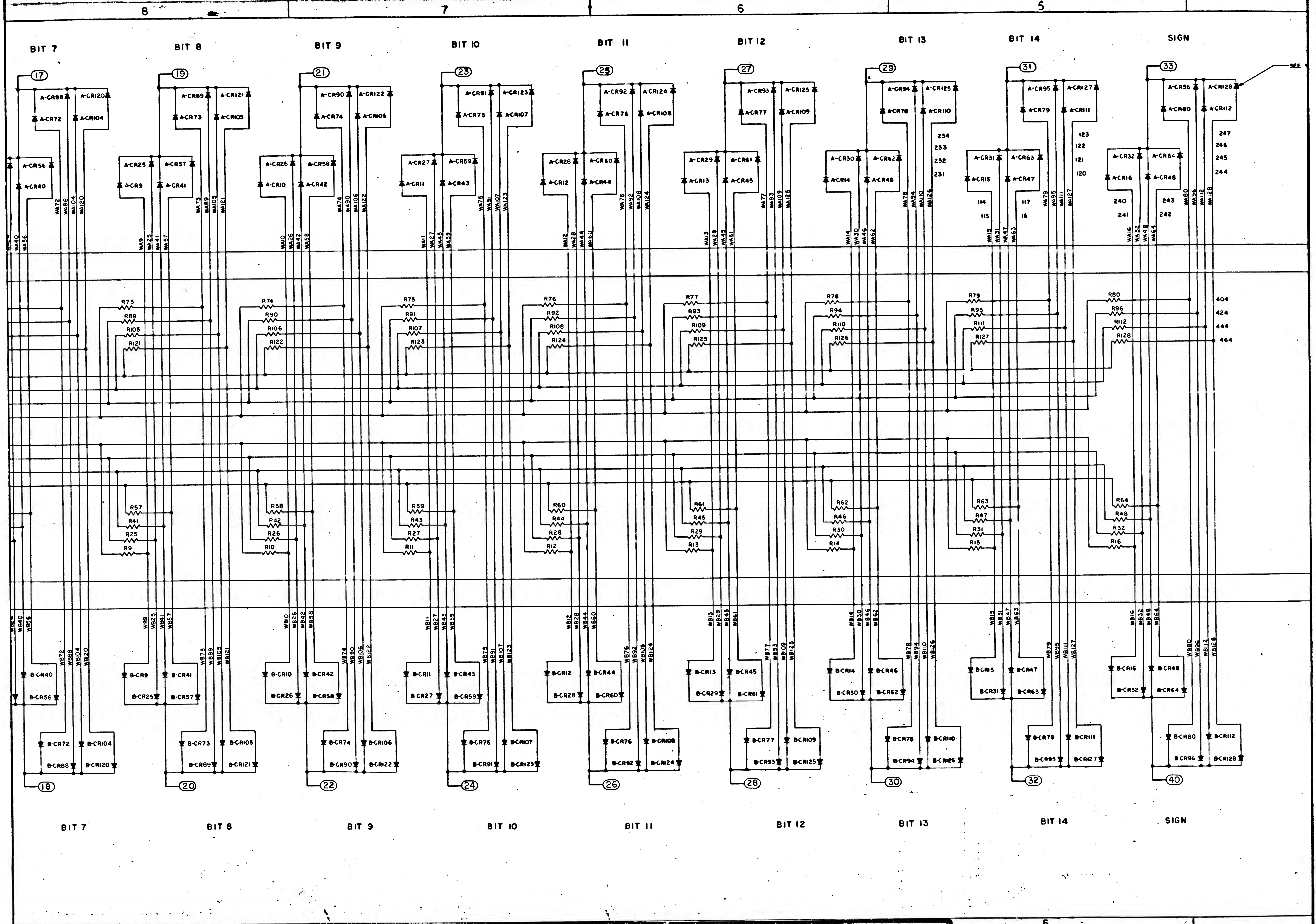
SCHEMATIC
ROPE MODULE

CODE IDENT NO. 80230
SIZE J
NASA DRAWING NO. 1006144
SCALE #
WT
SHEET 1 OF 1

1006144

MASTER

F3/3



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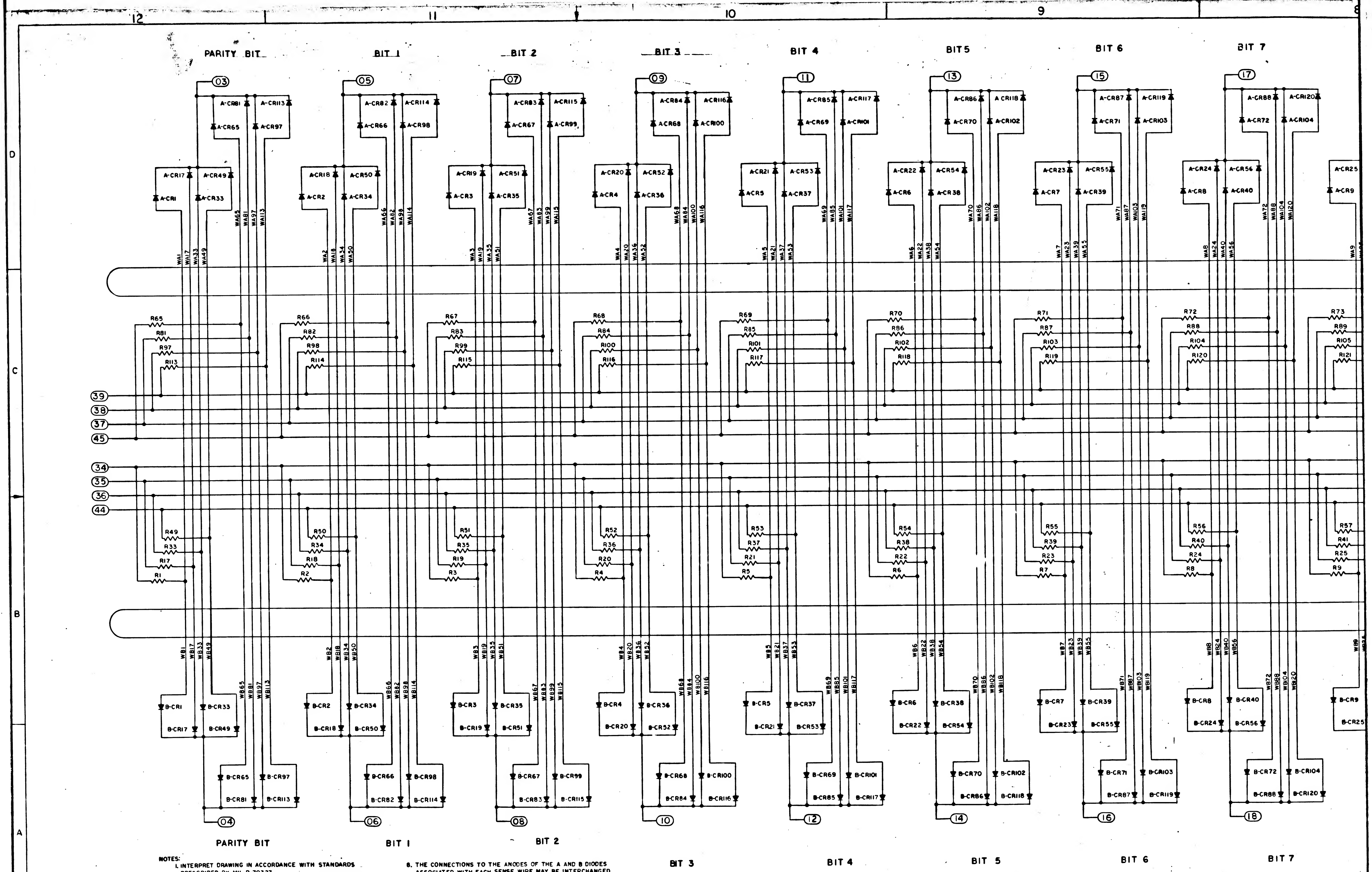
1006144 D 12 43

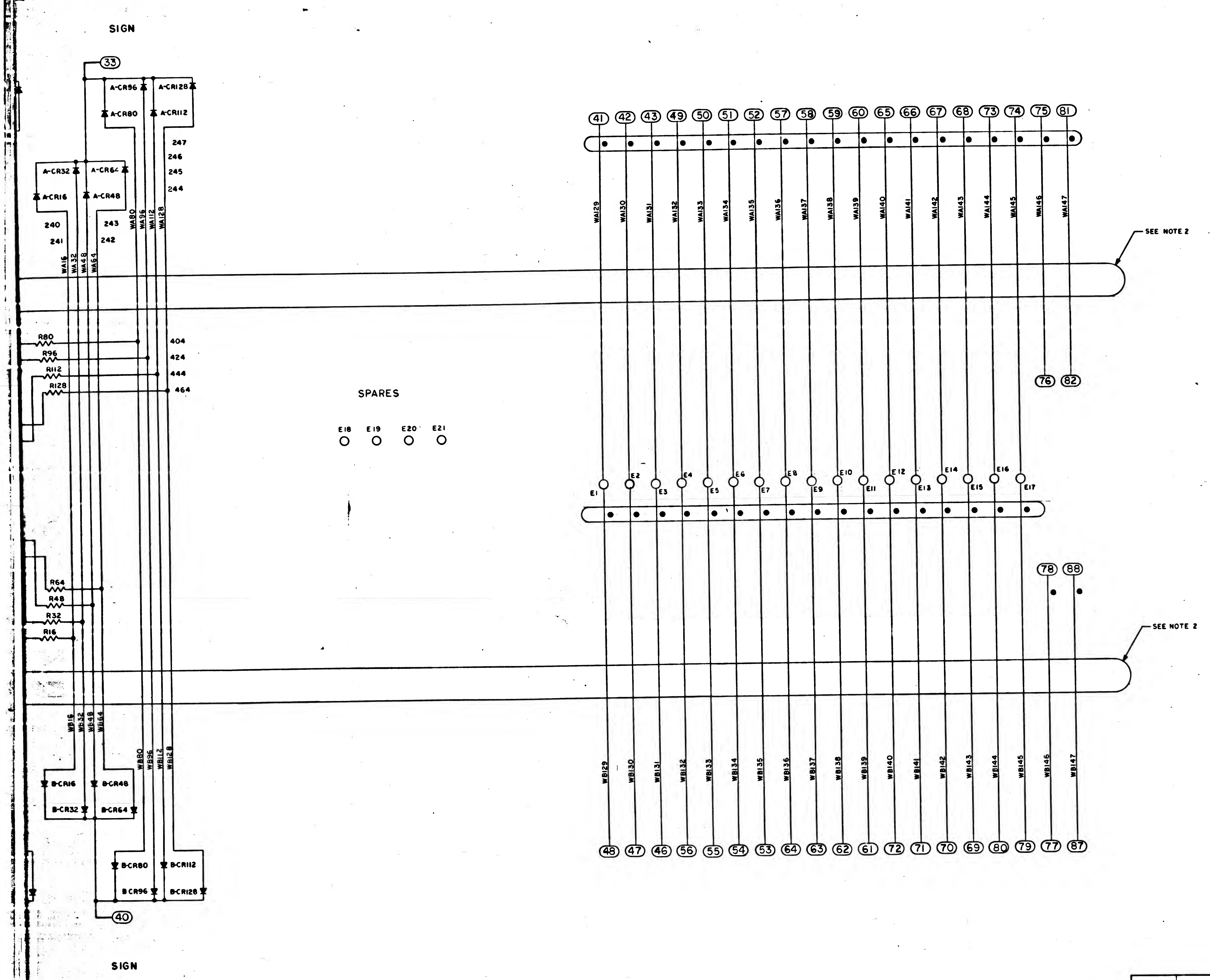


NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. ~~512 CORES ARE THREADED OR BY PASSED WITH ENCLOSED LINES IN ACCORDANCE WITH ASSY SPEC~~
3. PREFIX LETTER OF REF DESIGNATIONS OF DIODES DENOTES STRING NUMBER
4. "BAR" WIRES DO NOT THREAD FIRST CORE AND DO THREAD LAST CORE
5. DIODES MUST BE MATCHED PAIRS
6. FOR INHIBIT WIRING THRU CORES - SEE 1003821
7. SENSE WIRING THRU CORES IN ACCORDANCE WITH APPLIABLE MODULE DECK
8. THE CONNECTIONS TO THE ANODES OF THE A AND B DIODES ASSOCIATED WITH EACH SENSE WIRE MAY BE INTERCHANGED TO OPTIMIZE ELECTRICAL RESPONSE
9. FOR APPLICABLE CORE SEE ROPE MEMORY SUBASSEMBLY DRAWING 1003821

1006144

REVISIONS



WIRE ASSIGNMENT TABLE						
WIRE DESIGNATION	FUNCTION SIGN					
	STICK 1 OF ROPE			STICK 2 OF ROPE		
	R	S	T	R	S	T
WA1 – WA16	SS00	SS20	SS40	SS10	SS30	SS50
WA17 – WA32	SS01	SS21	SS 41	SS 11	SS 31	SS 51
WA33 – WA48	SS02	SS 22	SS 42	SS 12	SS 32	SS 52
WA49 – WA64	SS03	SS23	SS 43	SS13	SS 33	SS 53
WB1 – WB16	SS04	SS24	SS 44	SS 14	SS 34	SS 54
WB17 – WB32	SS05	SS25	SS45	SS15	SS 35	SS 55
WB33 – WB48	SS06	SS26	SS46	SS 16	SS 36	SS 56
WB49 – WB64	SS07	SS27	SS47	SS17	SS 37	SS 57
WA65 – WA80	SS100	SS120	SS140	SS110	SS130	SS150
WA81 – WA96	SS101	SS121	SS141	SS111	SS131	SS151
WA97 – WA112	SS102	SS122	SS142	SS112	SS132	SS152
WA113 – WA128	SS103	SS123	SS143	SS113	SS133	SS153
WB65 – WB80	SS104	SS124	SS144	SS114	SS134	SS154
WB81 – WB96	SS105	SS125	SS145	SS115	SS135	SS155
WB97 – WB112	SS106	SS126	SS146	SS116	SS 136	SS156
WB113 – WB128	SS107	SS127	SS147	SS117	SS 137	SS157
WA & WB129	RESET			RESET		
WA & WB130	7			7		
WA & WB131	$\overline{7}$			$\overline{7}$		
WA & WB132	6			6		
WA & WB133	$\overline{6}$			$\overline{6}$		
WA & WB134	5			5		
WA & WB135	$\overline{5}$			$\overline{5}$		
WA & WB136	4			4		
WA & WB137	$\overline{4}$			$\overline{4}$		
WA & WB138	3			3		
WA & WB139	$\overline{3}$			$\overline{3}$		
WA & WB140	2			2		
WA & WB141	$\overline{2}$			$\overline{2}$		
WA & WB142	1			1		
WA & WB143	$\overline{1}$			$\overline{1}$		
WA & WB144	P			P		
WA & WB145	$\overline{P}$			$\overline{P}$		
WA146	SET A			SET A		
WB146	SET C			SET C		
WA147	SET B			SET B		
WB147	SET D			SET D		

SEE NOTE 4 (WA & WB129 – WB147)

SEE NOTE 5 → 1006751

PART NO	DESCRIPTION	VALUE	TOL	RATING	QTY
1006750-39	RESISTOR	2000	±5%	1/4 W	128
1006751	DIODE				256
1006773-	CORE				512

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL —#—
HEAT TREATMENT —#—
FINAL FINISH —#—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN [illegible] DATE 7/29/63
CHECKED
APPROVAL Albert Hopkins 9-19
APPROVAL Eldon C Hall 19 Aug 63
NASA APPROVAL W. G. Rhine 9-19-63
MIT APPROVAL [illegible] 19/63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

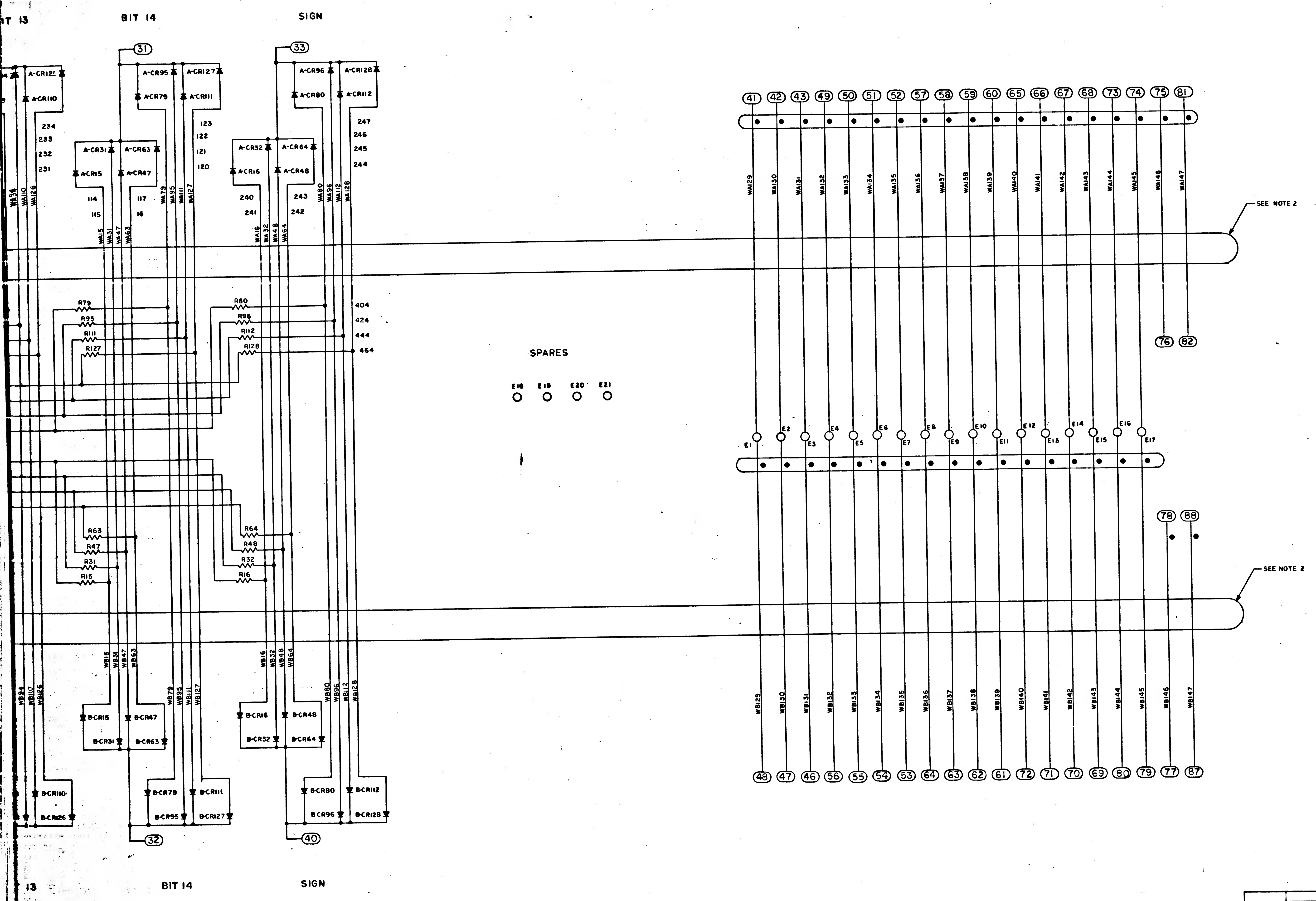
SCHEMATIC
ROPE MODULE

CODE IDENT NO. | SIZE | NASA DRAWING NO. 1006144
SCALE —#— | WT | SHEET 1 OF 1

INCHES
PHOTOGRAPHIC SCALE ONLY

F-4

1006144



WIRI ASSIGNMENT TABLE

WIRE DESIGNATION	FUNCTION		
	STICK I OF ROPE		
	R	S	T
WA1 – WA16	SS00	SS20	SS40
WA17 – WA32	SS0	SS2	SS4
WA33 – WA48	SS02	SS22	SS42
WA49 – WA64	SS03	SS23	SS43
WB1 – WB16	SS04	SS24	SS44
WB17 – WB32	SS05	SS25	SS45
WB33 – WB48	SS06	SS26	SS46
WB49 – WB64	SS07	SS27	SS47
WA65 – WA80	SS100	SS120	SS140
WA81 – WA96	SS101	SS121	SS141
WA97 – WA112	SS102	SS122	SS142
WA113 – WA128	SS103	SS123	SS143
WB65 – WB80	SS104	SS124	SS144
WB81 – WB96	SS105	SS125	SS145
WB97 – WB112	SS106	SS126	SS146
WB113 – WB128	SS107	SS127	SS147
WA & WB129	RESET		
WA & WB130	7		
WA & WB131	$\overline{7}$		
WA & WB132	6		
WA & WB133	$\overline{6}$		
WA & WB134	5		
WA & WB135	$\overline{5}$		
WA & WB136	4		
WA & WB137	$\overline{4}$		
WA & WB138	3		
WA & WB139	$\overline{3}$		
WA & WB140	2		
WA & WB141	$\overline{2}$		
WA & WB142	1		
WA & WB143	$\overline{1}$		
WA & WB144	P		
WA & WB145	$\overline{P}$		
WA146	SET A		
WB146	SET C		
WA147	SET B		
WB147	SET D		

SEE NOTE 4

SEE NOTE 2

SEE NOTES →

PART NO	DESCRIPTION	VALUE
1006750-39	RESISTOR	2000
1006751	DIODE	
1006773-	CORE	

MASTER

QTY REQD	PART OR IDENTIFYING NO.

LIST OF MATERIAL

NEXT ASSY	USED ON
APPLICATION	

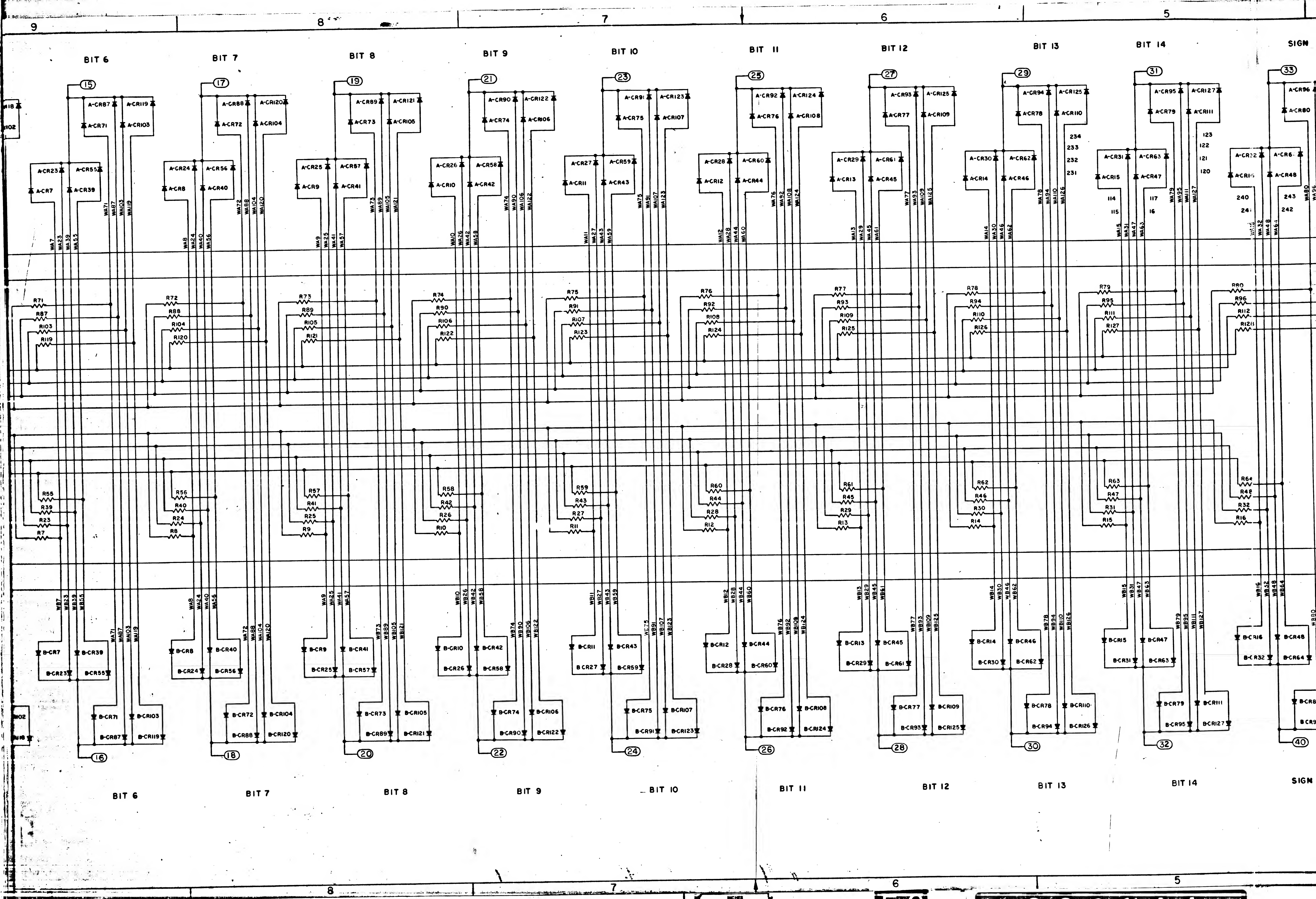
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL —#—
HEAT TREATMENT —#—
FINAL FINISH —#—

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS

DRAWN Brigham DATE 7/2/63
CHECKED
APPROVAL 7-19
APPROVAL Eldon C. Hall
NASA APPROVAL
MIT APPROVAL

CODE IDENT NO
SCALE

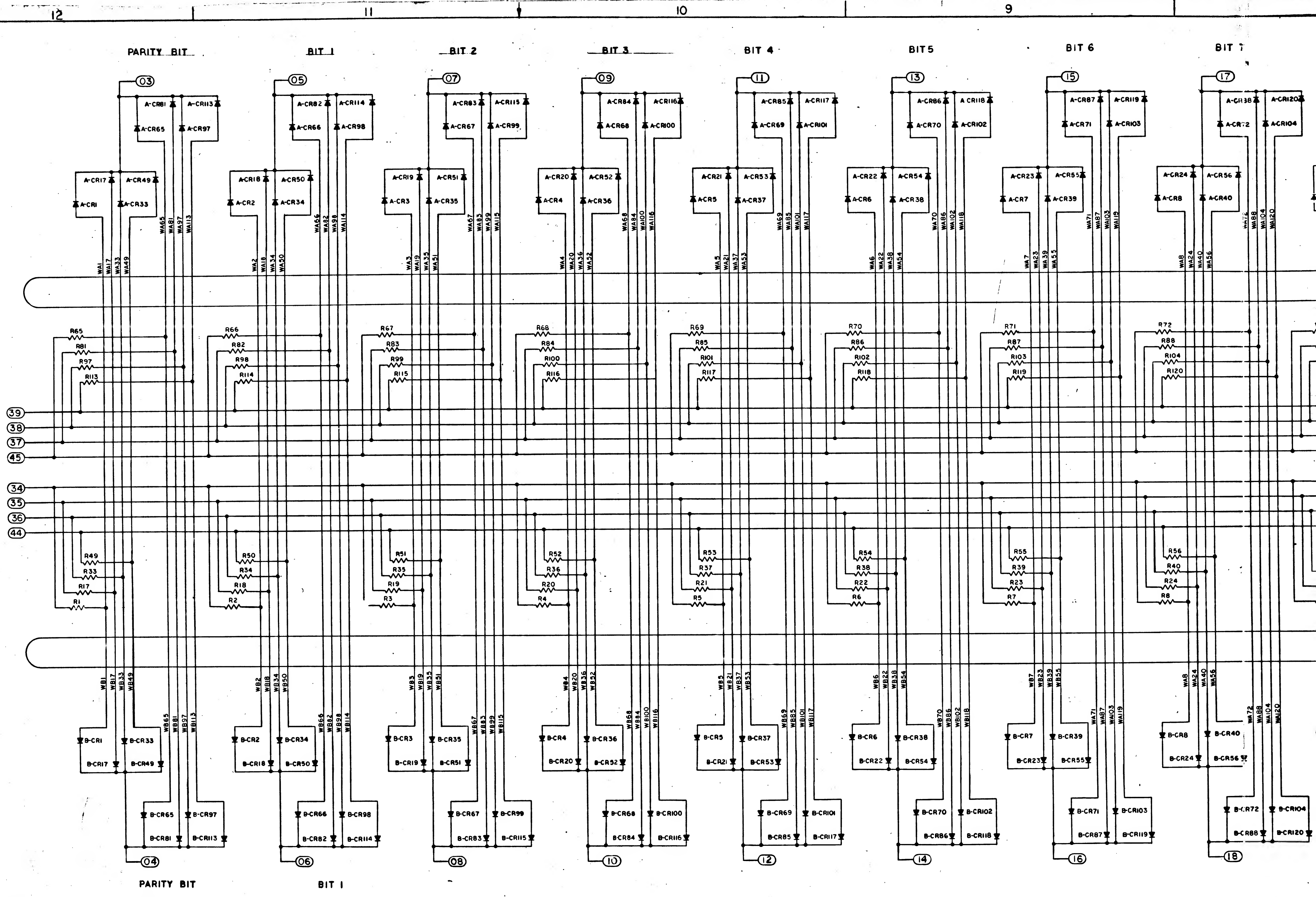
INCHES
PHOTOGRAPHIC SCALE ONLY



INCHES
PHOTOGRAPHIC SCALE ONLY

E2

1006144



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. 512 CORES ARE THREADED OR BY PASSED WITH ENCLOSED LINES IN ACCORDANCE WITH ASSY SPEC
3. PREFIX LETTER OF REF DESIGNATIONS OF DIODES DENOTES STRING NUMBER
4. "BAR" WIRES DO NOT THREAD FIRST CORE AND DO THREAD LAST CORE
5. DIODES MUST BE MATCHED PAIRS

12 11 10 9

INCHES
PHOTOGRAPHIC SCALE ONLY

F1

1006144

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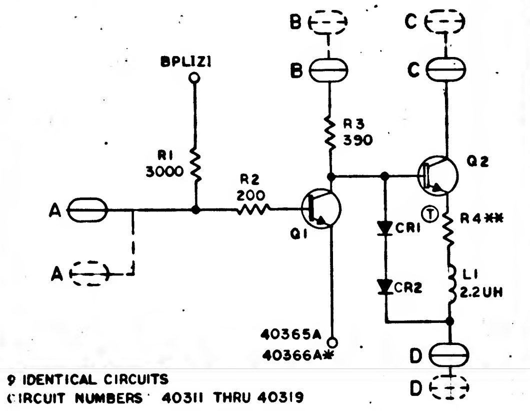
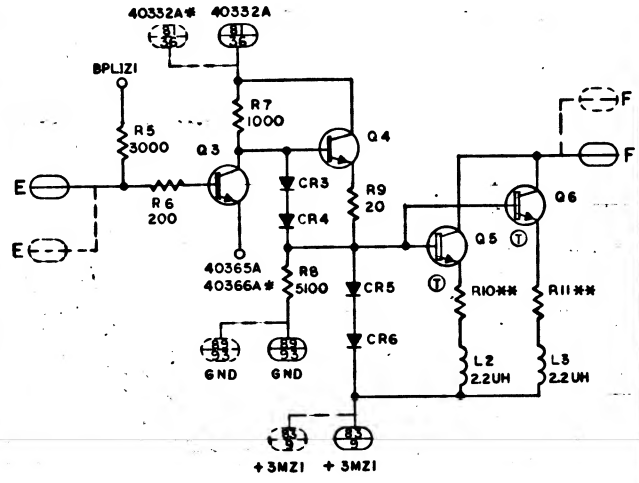
REVISIONS 03649			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 05562	12-31-63	

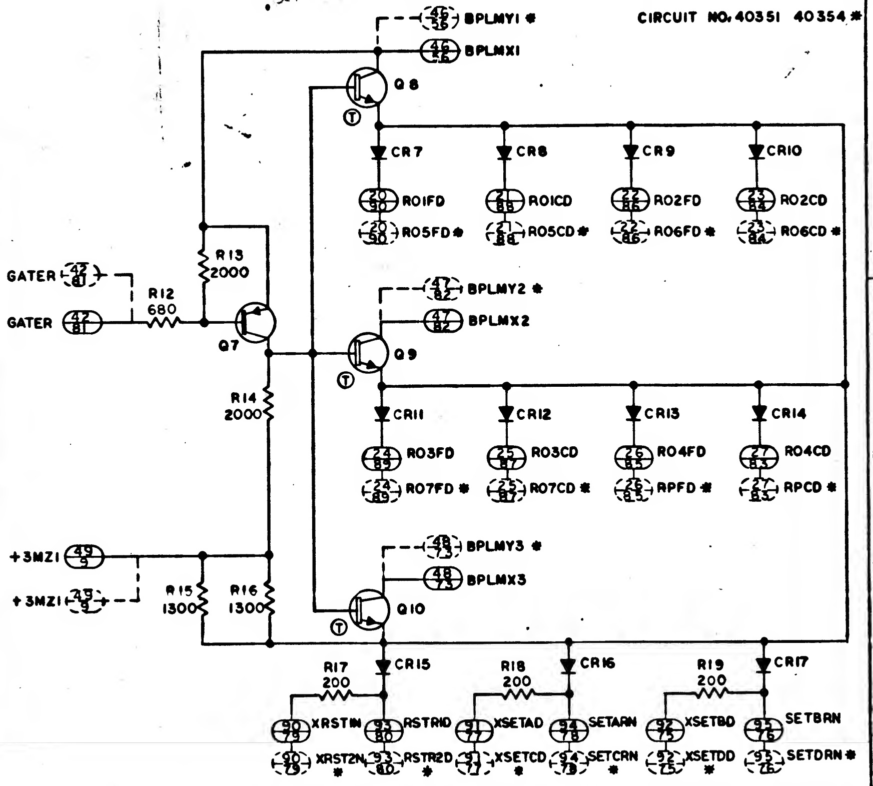


9 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40311 THRU 40319
40321 THRU 40329 *



CIRCUIT NUMBERS 40361 40362
40363* 40364*

CIRCUIT NO. 40351 40354 *



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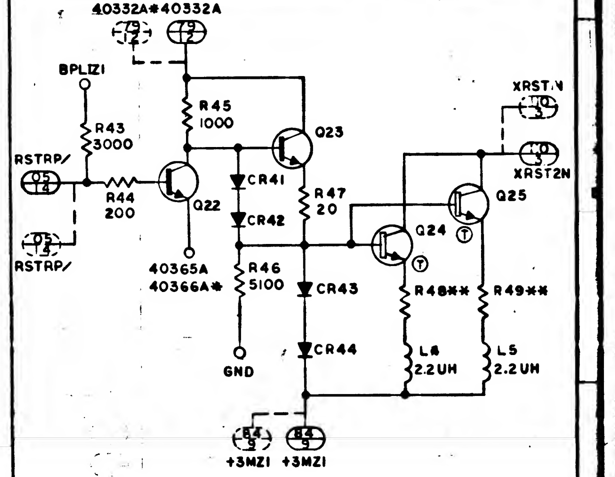

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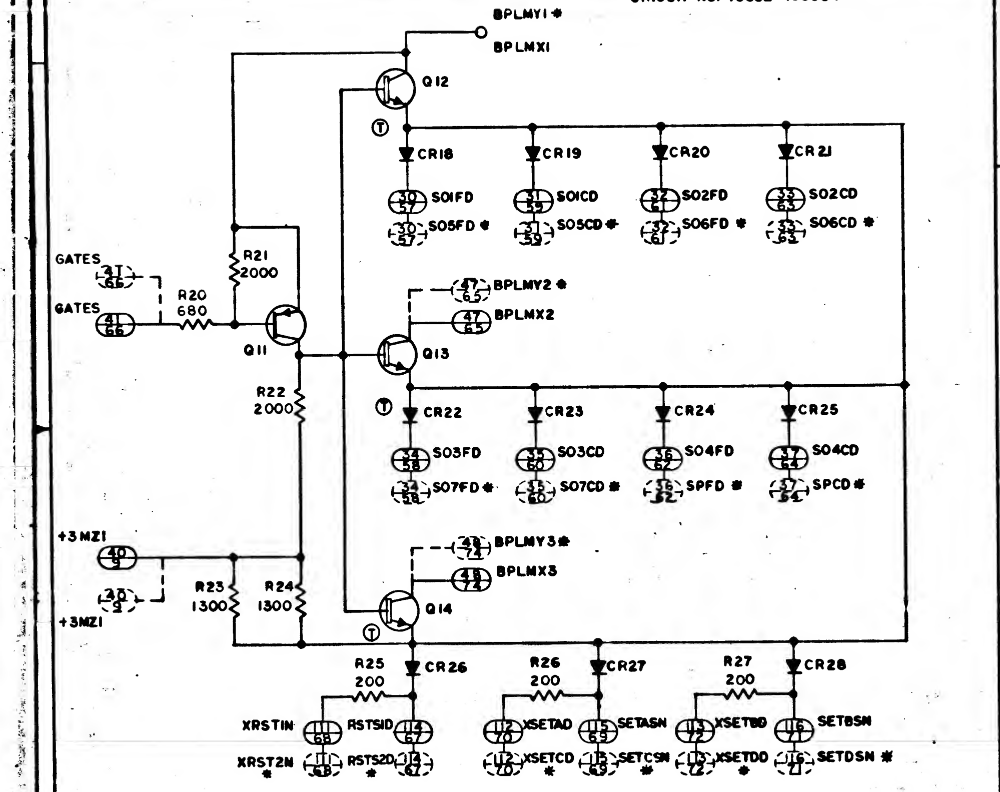

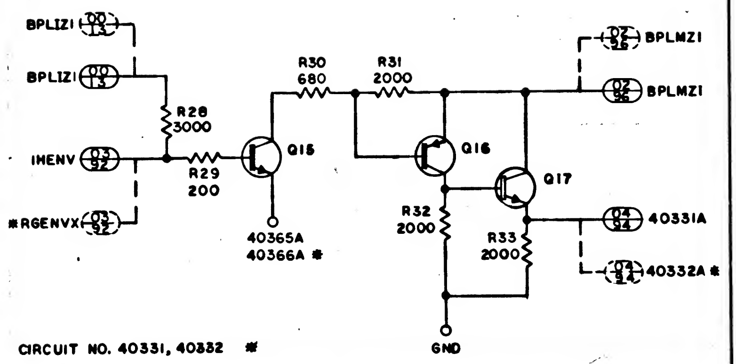

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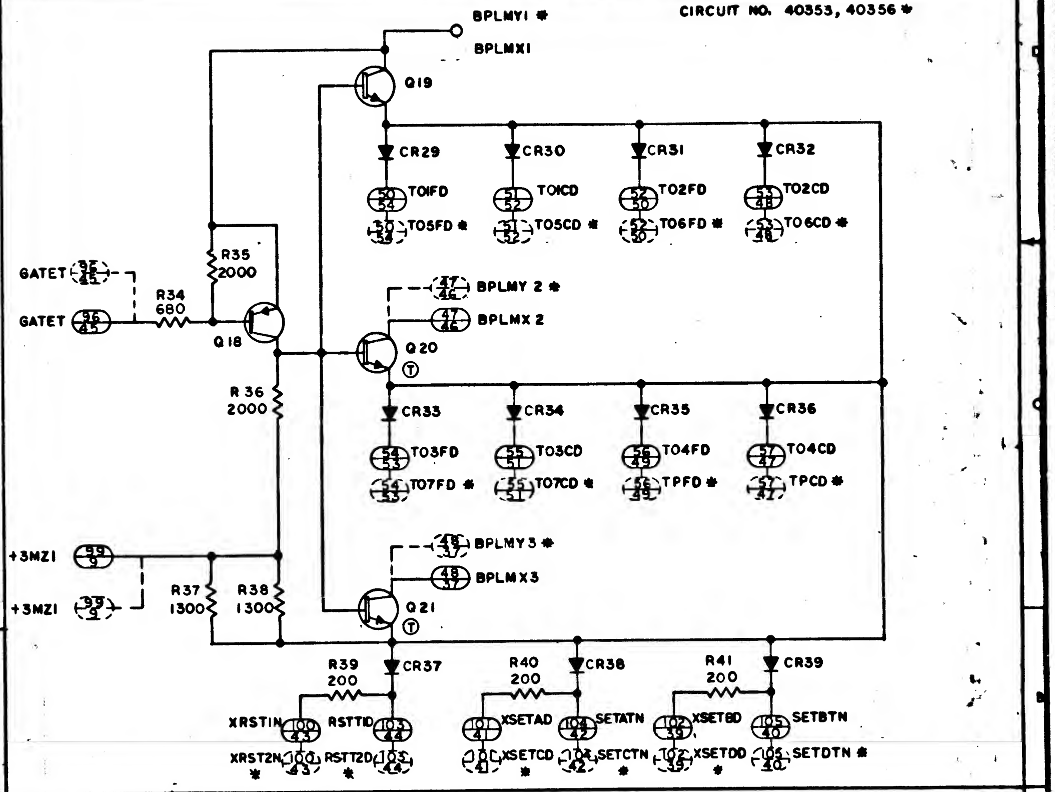
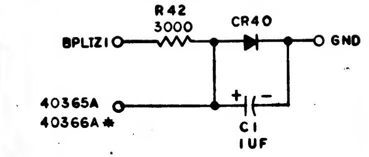
CIRCUIT NO. 40353, 40356 *



COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A SIGNAL	A PIN NO. AGC 4	A PIN NO. AGC 5	B SIGNAL	B PIN NO. AG4 4	B PIN NO. AGC 5	C SIGNAL	C PIN NO. AGC 4	C PIN NO. AGC 5	D SIGNAL	D PIN NO. AGC 4	D PIN NO. AGC 5	E SIGNAL	E PIN NO. AGC 4	E PIN NO. AGC 5	F SIGNAL	F PIN NO. AGC 4	F PIN NO. AGC 5
1	40311	IL01	10	140	40331A	70	99	X01FN	119	139	+3MX1	60	133						
2	40312	IL01/	11	137				X01CN	118	138		61							
3	40313	IL02	12	130				X02FN	117	129		62							
4	40314	IL02/	13	127				X02CN	88	128	↓	63	↓						
5	40315	IL03	14	118				X03FN	87	117	+3MX2	64	111						
6	40316	IL03/	15	115				X03CN	86	116		65							
7	40317	IL04	16	108	↓	↓	↓	X04FN	08	107		66							
8	40318	IL04/	17	105	40331A	70	99	X04CN	07	106	↓	67	↓						
9	40319	N.C.	18	102	N.C.	78	100	N.C.	06	95	N.C.	68	97						
1	40321 *	IL05	10	140	40331A	70	99	X05FN	119	139	+3MY1	60	133						
2	40322 *	IL05/	11	137				X05CN	118	138		61							
3	40323 *	IL06	12	130				X06FN	117	129		62							
4	40324 *	IL06/	13	127				X06CN	88	128	↓	63	↓						
5	40325 *	IL07	14	118				X07FN	87	117	+3MY2	64	111						
6	40326 *	IL07/	15	115				X07CN	86	116		65							
7	40327 *	ILP	16	108	↓	↓	↓	XPFN	08	107		66							
8	40328 *	ILP/	17	105	40331A	70	99	XPCN	07	106	↓	67	↓						
9	40329 *	N.C.	18	102	N.C.	78	100	N.C.	06	95	N.C.	68	97						
1	40361													SETA/	85	38	XSETAD	75	25
2	40362													SETB/	82	17	XSETBD	72	30
1	40363 *													SETC/	85	38	XSETCD	75	25
2	40364 *													SETD/	82	17	XSETDD	72	30



CIRCUIT NO. 40365, 40366 *

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR MODULE NO. B33 ARE INDICATED BY AN ASTERISK (*) OR BY DOTTED BALLOONS ( ) AND ALL OTHERS INDICATE MODULE NO. B32
4. ** TO BE SELECTED AT ELECTRICAL TEST

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN A. DiLeo DATE
CHECKED
APPROVAL DJ Barber 2 Oct 63
APPROVAL Ellen C Hall 2 Oct 63
NASA APPROVAL W J Rhine 10-3-63
MIT APPROVAL 3 Oct 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006147
SCALE — WT — SHEET 1 OF 2

1006147 A

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 03649			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 05562	12-31-63	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO.2
R1	1006750-43	RESISTOR	3000	±2%	1/4W	40311 THRU 40319	40321 THRU 40329
R2	-15		200				
R3	-22		390				
R4	SEE CHART A					40361 40362	40363 40364
R5	1006750-43		3000				
R6	-15		200				
R7	-32		1000				
R8	-49		5100				
R9	1006788-8		20	±1%			
R10	SEE CHART B						
R11	SEE CHART B						
R12	1006750-28		680	±2%		40351	40354
R13	-39		2000				
R14	-39		2000				
R15	-35		1300				
R16	-35		1300				
R17	-15		200				
R18	-15		200				
R19	-15		200				
R20	-28		680			40352	40355
R21	-39		2000				
R22	-39		2000				
R23	-35		1300				
R24	-35		1300				
R25	-15		200				
R26	-15		200				
R27	-15		200				
R28	-43		3000			40331	40332A
R29	-15		200				
R30	-28		680				
R31	-39		2000				
R32	-39		2000				
R33	-39		2000				
R34	-28		680			40353	40356
R35	-39		2000				
R36	-39		2000				
R37	-35		1300				
R38	-35		1300				
R39	-15		200				
R40	-15		200				
R41	-15		200				
R42	-43		3000			40365	40366
R43	-43		3000			40367	40368
R44	-15		200				
R45	-32		1000				
R46	-49		5100				
R47	1006788-8		20	±1%			
R48	SEE CHART C						
R49	SEE CHART C						
C1	1006755-69	CAPACITOR	1 UF		35VDC	40365	40366
L1	1010406-10	COIL	2.2 UH			40311 THRU 40319	40321 THRU 40329
L2	-10		2.2 UH			40361 40362	40363 40364
L3	-10		2.2 UH				
L4	-10		2.2 UH			40367	40368
L5	-10		2.2 UH				

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO 2
CR1	1006751	DIODE				40311 THRU 40319	40321 THRU 40329
CR2							
CR3						40361 40362	40363 40364
CR4							
CR5							
CR6							
CR7						40351	40354
CR8							
CR9							
CR10							
CR11							
CR12							
CR13							
CR14							
CR15							
CR16							
CR17							
CR18						40352	40355
CR19							
CR20							
CR21							
CR22							
CR23							
CR24							
CR25							
CR26							
CR27							
CR28							
CR29						40353	40356
CR30							
CR31							
CR32							
CR33							
CR34							
CR35							
CR36							
CR37							
CR38							
CR39							
CR40						40365	40366
CR41						40367	40368
CR42							
CR43							
CR44							
Q1	1006752	TRANSISTOR				40311 THRU 40319	40321 THRU 40329
Q2	1006759						
Q3	1006752					40361 40362	40363 40364
Q4	1006752						
Q5	1006759						
Q6	1006759						
Q7	1006753					40351	40354
Q8	1006759						
Q9							
Q10							
Q11	1006753					40352	40355
Q12	1006759						
Q13							
Q14							
Q15	1006752					40331	40332A
Q16	1006753						
Q17	1006759						
Q18	1006753					40353	40356
Q19	1006759						
Q20							
Q21							
Q22	1006752					40367	40368
Q23	1006752						
Q24	1006759						
Q25							

CHART A REF R4
SEE NOTE 4

VALUE (OHMS)	PART NO.
1.5	1006788-51
1.6	-53
1.7	-16
1.8	-18
1.9	-20
2.0	-22
2.1	-24
2.2	-26
2.3	-28
2.4	-15
2.5	-29
2.6	-30
2.7	-31
2.8	-32

CHART B REF R10 & R11
SEE NOTE 4

VALUE (OHMS)	PART NO.
2.5	1006788-29
2.6	-30
2.7	-31
2.8	-32
2.9	-33
3.0	-34
3.1	-35
3.2	-36
3.3	-37
3.4	-38
3.5	-39
3.6	-40
3.7	-41
3.8	-42
3.9	-43
4.0	-44
4.1	-45
4.2	-46
4.3	-47
4.4	-48
4.5	-49

CHART C REF R48 & R49
SEE NOTE 4

VALUE (OHMS)	PART NO.
3.0	1006788-34
3.1	-35
3.2	-36
3.3	-37
3.4	-38
3.5	-39
3.6	-40
3.7	-41
3.8	-42
3.9	-43
4.0	-44
4.1	-45
4.2	-46
4.3	-47
4.4	-48
4.5	-49
4.6	-50
4.7	-1
4.8	-2
4.9	-3
5.0	-4

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN DATE
CHECKED
APPROVAL 2 Oct 63
APPROVAL
NASA APPROVAL 10-3-63
MIT APPROVAL 3 Oct 63

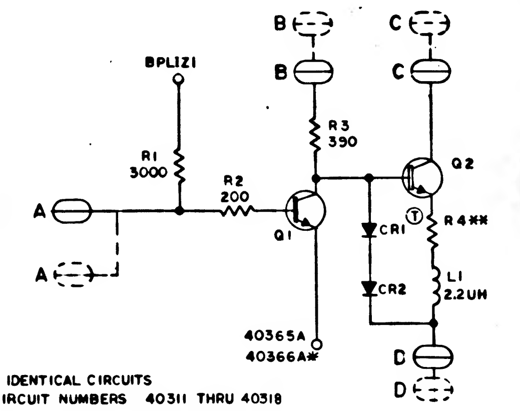
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

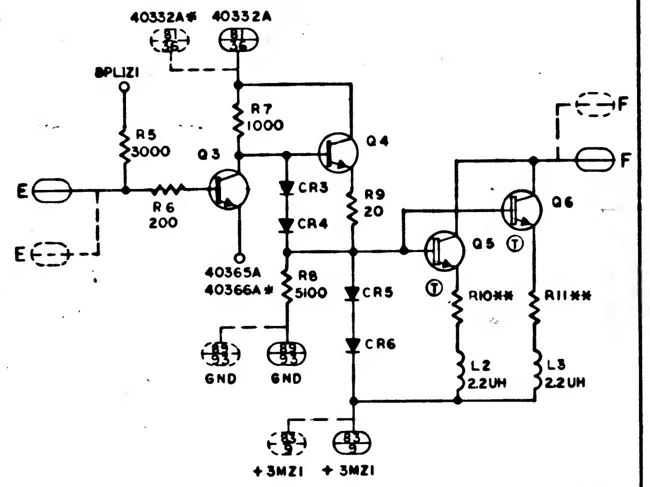
CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006147
SCALE —
WT —
SHEET 2 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 05562	12-31-63	
B	REVISED PER TDRR 08106 DR R.D.D. CHK R.W.E.	4/30/64	

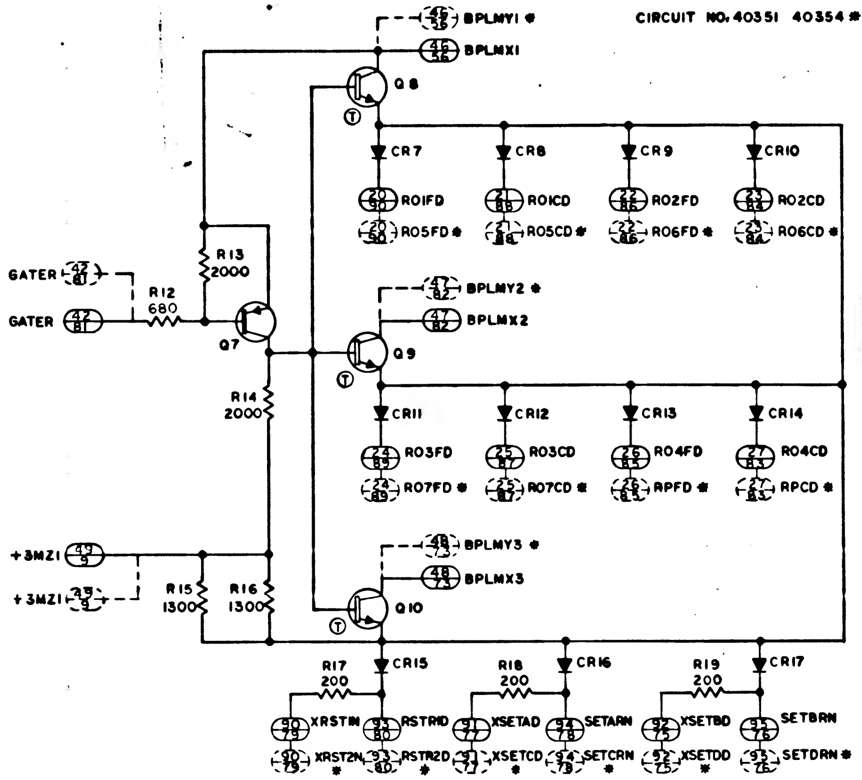


9 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40311 THRU 40318
40321 THRU 40328 *

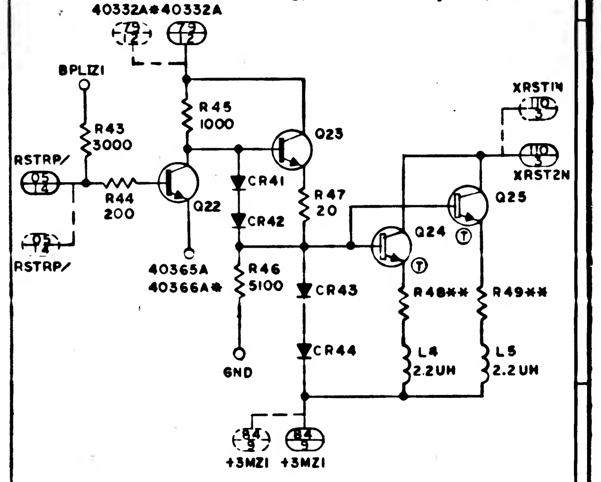


CIRCUIT NUMBERS 40361 40362
40363*40364*

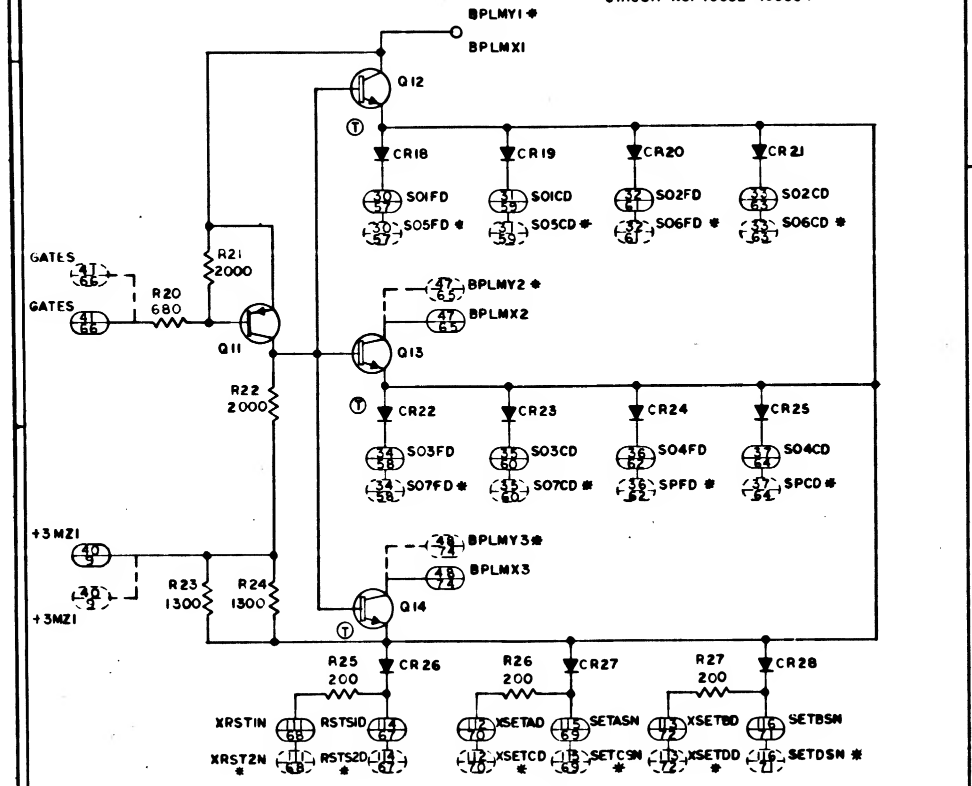
CIRCUIT NO. 40351 40354 *

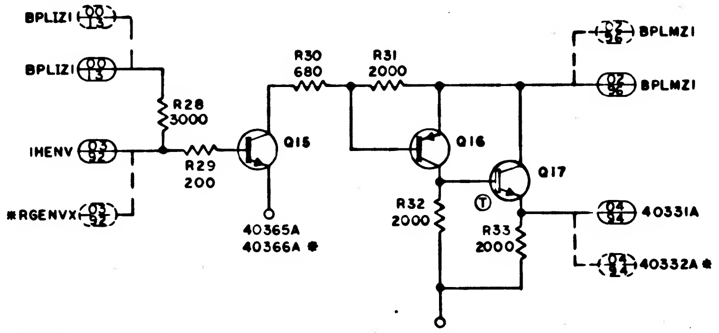


CIRCUIT NO. 40367, 40368 *



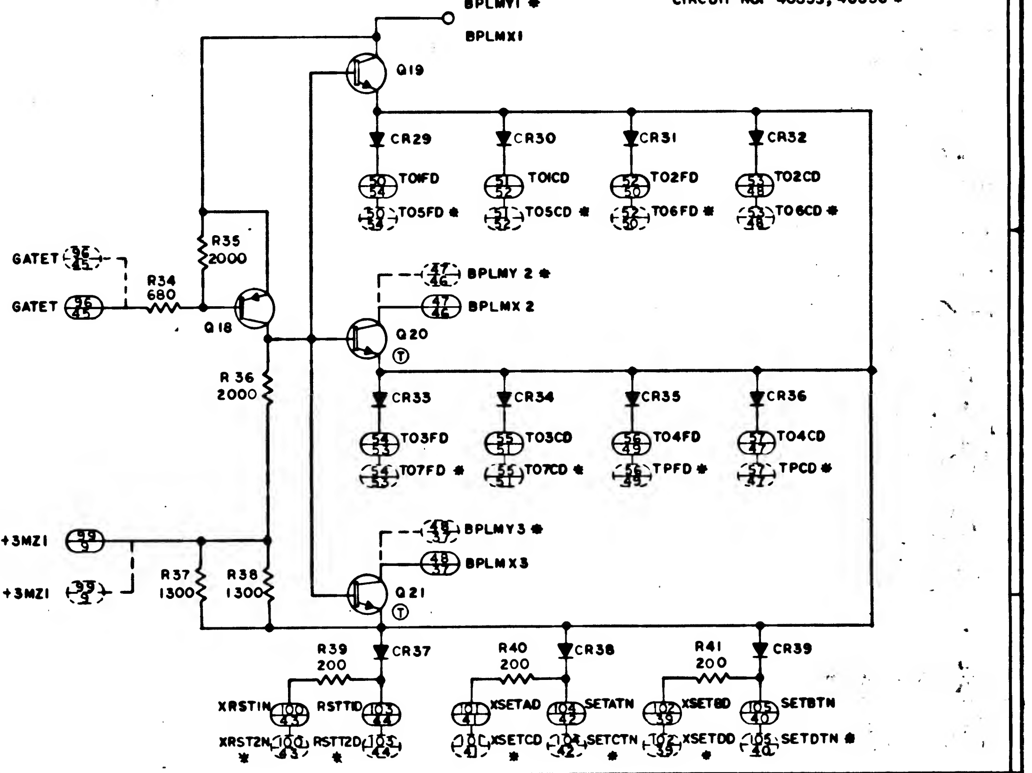
CIRCUIT NO. 40352 40355*

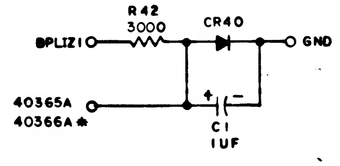




CIRCUIT NO. 40331, 40332 *

CIRCUIT NO. 40353, 40356 *





CIRCUIT NO. 40365, 40366 *

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E			F		
		SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AG4 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5	SIGNAL	PIN NO. AGC 4	PIN NO. AGC 5
1	40311	IL01	10	140	40331A	70	99	X01FN	119	139	+3MX1	60	133						
2	40312	IL01/	11	137				X01CN	118	138		61							
3	40313	IL02	12	130				X02FN	117	129		62							
4	40314	IL02/	13	127				X02CN	88	128	↓	63	↓						
5	40315	IL03	14	118				X03FN	87	117	+3MX2	64	111						
6	40316	IL03/	15	115				X03CN	86	116		65							
7	40317	IL04	16	108	↓	↓	↓	X04FN	08	107		66							
8	40318	IL04/	17	105	40331A	70	99	X04CN	07	106	↓	67	↓						
~~9~~	~~40319~~	~~NC~~	~~18~~	~~102~~	~~N.C.~~	~~78~~	~~100~~	~~NC~~	~~06~~	~~95~~	~~NC~~	~~68~~	~~97~~						
1	40321 *	IL05	10	140	40331A	70	99	X05FN	119	139	+3MY1	60	133						
2	40322 *	IL05/	11	137				X05CN	118	138		61							
3	40323 *	IL06	12	130				X06FN	117	129		62							
4	40324 *	IL06/	13	127				X06CN	88	128	↓	63	↓						
5	40325 *	IL07	14	118				X07FN	87	117	+3MY2	64	111						
6	40326 *	IL07/	15	115				X07CN	86	116		65							
7	40327 *	ILP	16	108	↓	↓	↓	XPFN	08	107		66							
8	40328 *	ILP/	17	105	40331A	70	99	XPCN	07	106	↓	67	↓						
~~9~~	~~40329 *~~	~~N.C.~~	~~18~~	~~102~~	~~N.C.~~	~~78~~	~~100~~	~~N.C.~~	~~06~~	~~95~~	~~N.C.~~	~~68~~	~~97~~						
1	40361													SETA/	85	38	XSETAD	75	25
2	40362													SETB/	82	17	XSETBD	72	30
1	40363 *													SETC/	85	38	XSETCD	75	25
2	40364 *													SETD/	82	17	XSETDD	72	30

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR MODULE NO. B33 ARE INDICATED BY AN ASTERISK (*) OR BY DOTTED BALLOONS (- -) AND ALL OTHERS INDICATE MODULE NO. B32
4. ** TO BE SELECTED AT ELECTRICAL TEST

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DRAWN A. DiLeo DATE
CHECKED
APPROVAL OJ Barb 26-63
APPROVAL 26-63
NASA APPROVAL W.J. 10-3-63
MIT APPROVAL 3 Oct 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006147
SCALE — WT — SHEET 1 OF 2

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS 036-1

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 05562	[illegible]	
B	REVISED PER TDRR 08105 DR. J.D. CHK	4/30/64	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO.2
R1	1006750-43	RESISTOR	3000	±2%	1/4W	40311 THRU 40318	40321 THRU 40328
R2	-15		200				
R3	↓ -22		390				
R4	SEE CHART A						
R5	1006750-43		3000			40361 40362	40363 40364
R6	-15		200				
R7	-32		1000				
R8	↓ -49		5100	↓			
R9	1006788-8		20	±1%			
R10	SEE CHART B						
R11	SEE CHART B			↓			
R12	1006750-28		680	±2%		40351	40354
R13	-39		2000				
R14	-39		2000				
R15	-35		1300				
R16	-35		1300				
R17	-15		200				
R18	-15		200				
R19	-15		200				
R20	-28		680			40352	40355
R21	-39		2000				
R22	-39		2000				
R23	-35		1300				
R24	-35		1300				
R25	-15		200				
R26	-15		200				
R27	-15		200				
R28	-43		3000			40331	40332A
R29	-15		200				
R30	-28		680				
R31	-39		2000				
R32	-39		2000				
R33	-39		2000				
R34	-28		680			40353	40356
R35	-39		2000				
R36	-39		2000				
R37	-35		1300				
R38	-35		1300				
R39	-15		200				
R40	-15		200				
R41	-15		200				
R42	-43		3000			40365	40366
R43	-43		3000			40367	40368
R44	-15		200				
R45	-32		1000				
R46	↓ -49		5100	↓			
R47	1006788-8		20	±1%			
R48	SEE CHART C						
R49	SEE CHART C	↓		↓	↓		
C1	1006755-69	CAPACITOR	1 UF		35VDC	40365	40366
L1	1010406-10	COIL	2.2 UH			40311 THRU 40318	40321 THRU 40328
L2	-10		2.2 UH			40361 40362	40363 40364
L3	-10		2.2 UH				
L4	-10		2.2 UH			40367	40368
L5	↓ -10	↓	2.2 UH				

CHART A REF R4
SEE NOTE 4

VALUE (OHMS)	PART NO.
1.5	1006788-51
1.6	-53
1.7	-16
1.8	-18
1.9	-20
2.0	-22
2.1	-24
2.2	-26
2.3	-28
2.4	-15
2.5	-29
2.6	-30
2.7	-31
2.8	↓ -32

CHART B REF R10 & R11
SEE NOTE 4

VALUE (OHMS)	PART NO.
2.5	1006788-29
2.6	-30
2.7	-31
2.8	-32
2.9	-33
3.0	-34
3.1	-35
3.2	-36
3.3	-37
3.4	-38
3.5	-39
3.6	-40
3.7	-41
3.8	-42
3.9	-43
4.0	-44
4.1	-45
4.2	-46
4.3	-47
4.4	-48
4.5	↓ -49

CHART C REF R48 & R49
SEE NOTE 4

VALUE (OHMS)	PART NO.
3.0	1006788-34
3.1	-35
3.2	-36
3.3	-37
3.4	-38
3.5	-39
3.6	-40
3.7	-41
3.8	-42
3.9	-43
4.0	-44
4.1	-45
4.2	-46
4.3	-47
4.4	-48
4.5	-49
4.6	-50
4.7	-1
4.8	-2
4.9	-3
5.0	↓ -4

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO.2
CR1	1006751	DIODE				40311 THRU 40318	40321 THRU 40328
CR2							
CR3						40361 40362	40363 40364
CR4							
CR5							
CR6							
CR7						40351	40354
CR8							
CR9							
CR10							
CR11							
CR12							
CR13							
CR14							
CR15							
CR16							
CR17							
CR18						40352	40355
CR19							
CR20							
CR21							
CR22							
CR23							
CR24							
CR25							
CR26							
CR27							
CP28							
CR29						40353	40356
CR30							
CR31							
CR32							
CR33							
CR34							
CR35							
CR36							
CR37							
CR38							
CR39							
CR40						40365	40366
CR41						40367	40368
CR42							
CR43							
CR44	↓	↓					
Q1	1006752	TRANSISTOR				40311 THRU 40318	40321 THRU 40328
Q2	1006759						
Q3	1006752					40361 40362	40363 40364
Q4	1006752						
Q5	1006759						
Q6	1006759						
Q7	1006753					40351	40354
Q8	1006759						
Q9							
Q10	↓						
Q11	1006753					40352	40355
Q12	1006759						
Q13							
Q14	↓						
Q15	1006752					40331	40332A
Q16	1006753						
Q17	1006759						
Q18	1006753					40353	40356
Q19	1006759						
Q20							
Q21	↓						
Q22	1006752					40367	40368
Q23	1006752						
Q24	1006759						
Q25	↓	↓					

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

M I T
INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG NO
CONTRACT

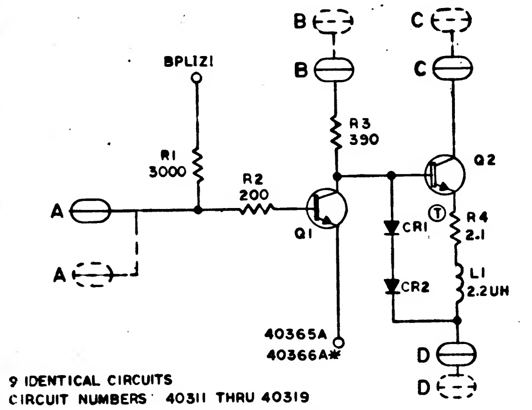
DRAWN Q. Di'leo DATE
CHECKED
APPROVAL 2 Oct 63
APPROVAL 2 Oct 63
NASA APPROVAL 10-2-63
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

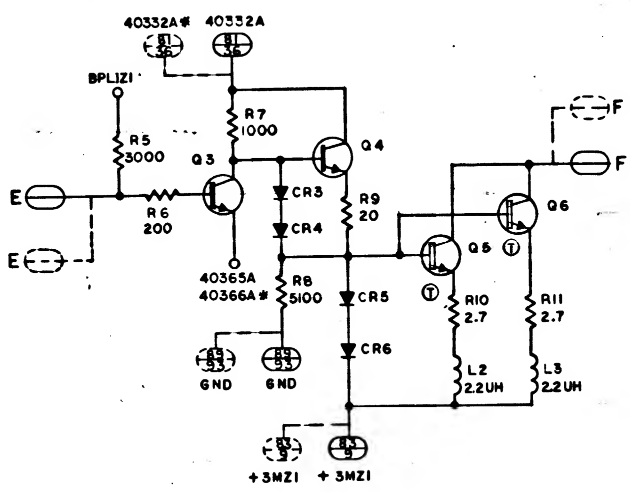
SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006147
SCALE —
WT —
SHEET 2 OF 2

REVISIONS 03647

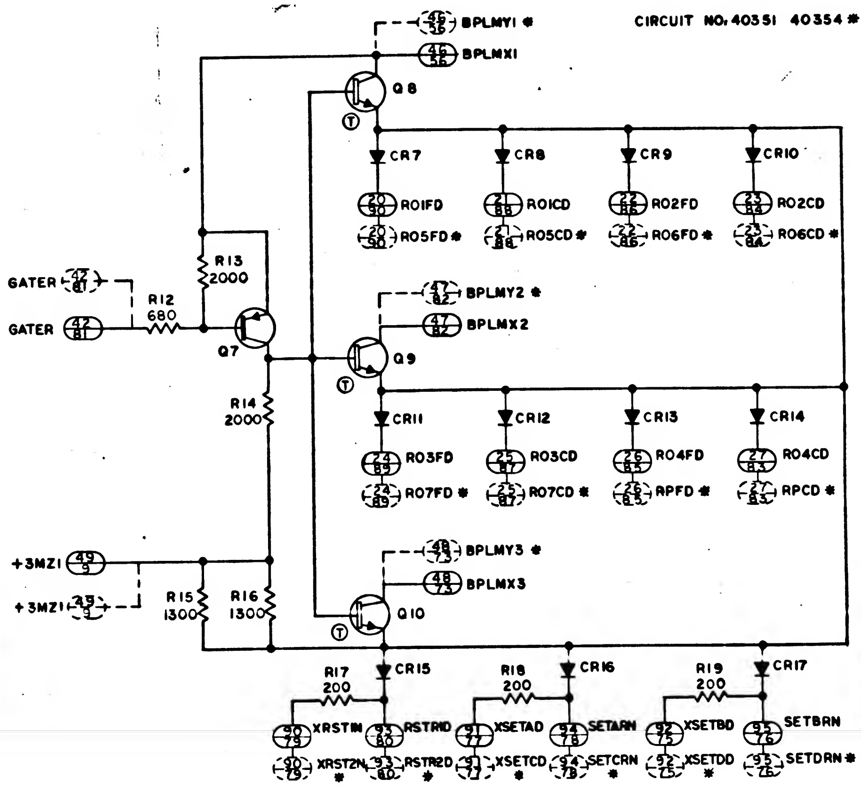


9 IDENTICAL CIRCUITS
CIRCUIT NUMBERS 40311 THRU 40319
40321 THRU 40329 *



CIRCUIT NUMBERS 40361 40362
40363*40364*

CIRCUIT NO. 40351 40354 *



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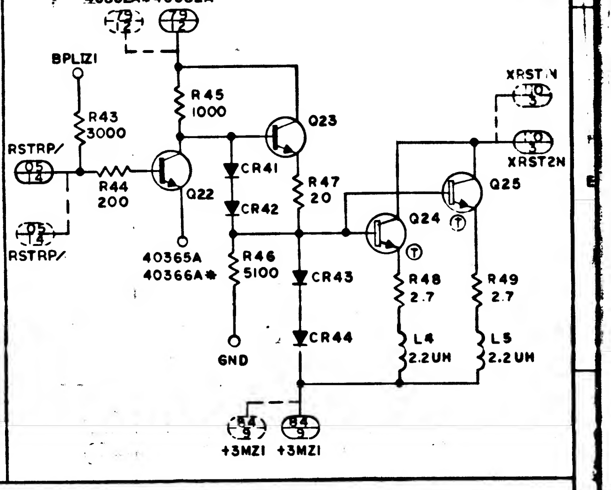
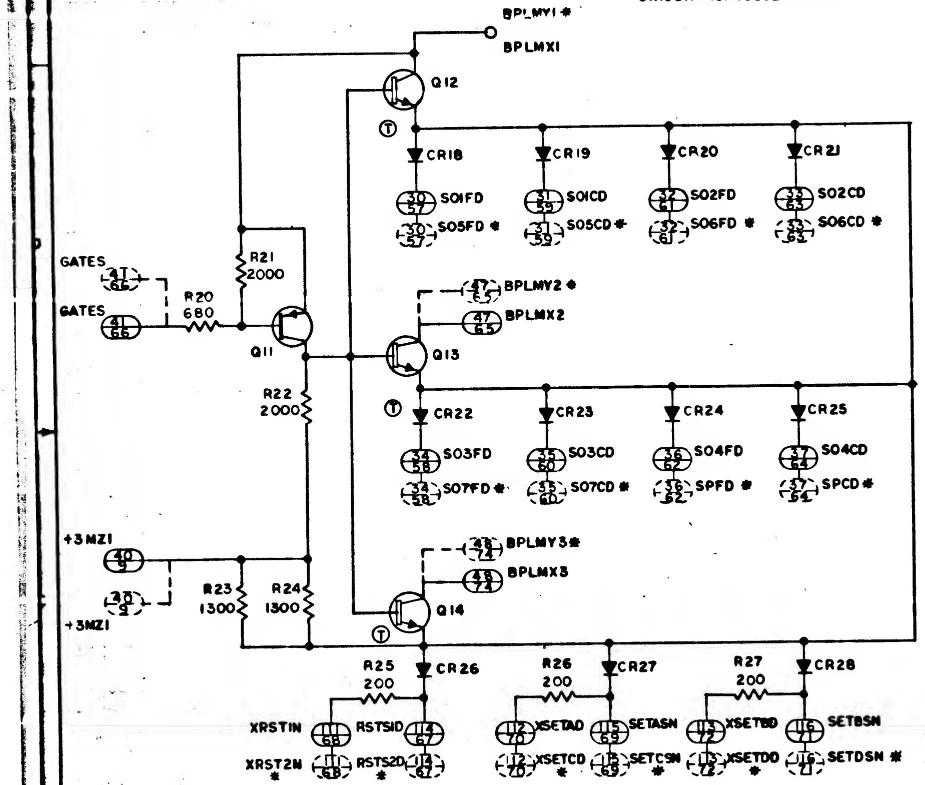
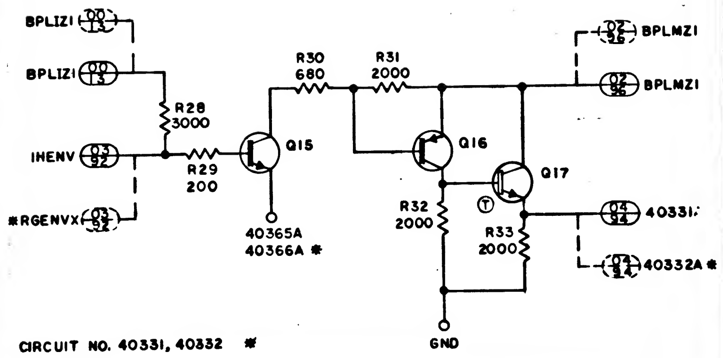


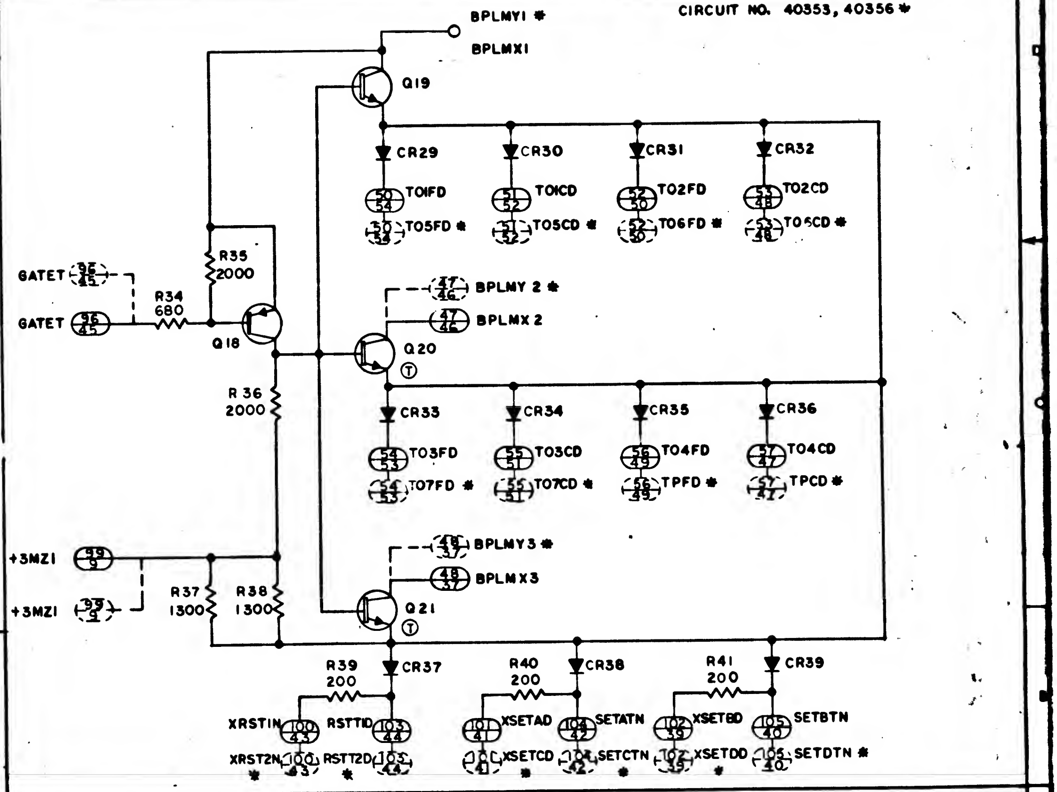
CIRCUIT NO. 40352 40355*

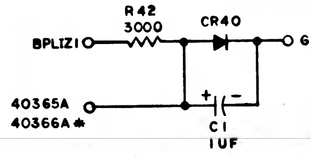




CIRCUIT NO. 40331, 40332 *

CIRCUIT NO. 40353, 40356 *





CIRCUIT NO. 40365, 40366 *

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A SIGNAL	A PIN NO. AGC 4	A PIN NO. AGC 5	B SIGNAL	B PIN NO. AG4 4	B PIN NO. AGC 5	C SIGNAL	C PIN NO. AGC 4	C PIN NO. AGC 5	D SIGNAL	D PIN NO. AGC 4	D PIN NO. AGC 5	E SIGNAL	E PIN NO. AGC 4	E PIN NO. AGC 5	F SIGNAL	F PIN NO. AGC 4	F PIN NO. AGC 5
1	40311	IL01	10	140	40331A	70	99	X01FN	119	139	+3MX1	60	133						
2	40312	IL01/	11	137	↓	↓	↓	X01CN	118	138	↓	61	↓						
3	40313	IL02	12	130	↓	↓	↓	X02FN	117	129	↓	62	↓						
4	40314	IL02/	13	127	↓	↓	↓	X02CN	88	128	↓	63	↓						
5	40315	IL03	14	118	↓	↓	↓	X03FN	87	117	+3MX2	64	111						
6	40316	IL03/	15	115	↓	↓	↓	X03CN	86	116	↓	65	↓						
7	40317	IL04	16	108	↓	↓	↓	X04FN	08	107	↓	66	↓						
8	40318	IL04/	17	105	40331A	70	99	X04CN	07	106	↓	67	↓						
9	40319	N.C.	18	102	N.C.	78	100	N.C.	06	95	N.C.	68	97						
1	40321 *	IL05	10	140	40331A	70	99	X05FN	119	139	+3MY1	60	133						
2	40322 *	IL05/	11	137	↓	↓	↓	X05CN	118	138	↓	61	↓						
3	40323 *	IL06	12	130	↓	↓	↓	X06FN	117	129	↓	62	↓						
4	40324 *	IL06/	13	127	↓	↓	↓	X06CN	88	128	↓	63	↓						
5	40325 *	IL07	14	118	↓	↓	↓	X07FN	87	117	+3MY2	64	111						
6	40326 *	IL07/	15	115	↓	↓	↓	X07CN	86	116	↓	65	↓						
7	40327 *	ILP	16	108	↓	↓	↓	XPFN	08	107	↓	66	↓						
8	40328 *	ILP/	17	105	40331A	70	99	XPCN	07	106	↓	67	↓						
9	40329 *	N.C.	18	102	N.C.	78	100	N.C.	06	95	N.C.	68	97						
1	40361													SETA/	85	38	XSETAD	75	25
2	40362													SETB/	82	17	XSETBD	72	30
1	40363 *													SETC/	85	38	XSETCD	75	25
2	40364 *													SETD/	82	17	XSETDD	72	30

NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS
3. CIRCUIT NUMBERS, PIN NUMBERS AND SIGNAL NAMES ON THE SCHEMATIC FOR MODULE NO. B33 ARE INDICATED BY AN ASTERISK (*) OR BY DOTTED BALLOONS (- -) AND ALL OTHERS INDICATE MODULE NO. B32

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± # DECIMALS ± # ANGLES ± #
DO NOT SCALE THIS DRAWING
MATERIAL #
HEAT TREATMENT #
FINAL FINISH #

MIT
INSTRUMENTATION LAB
CAMBRIDGE, MASS
DWG NO CONTRACT
DRAWN A. DiLeo DATE
CHECKED
APPROVAL OJ Barber 3 Oct 63
APPROVAL Eldon C Hall 3 Oct 63
NASA APPROVAL W J Rhine 10-3-63
MIT APPROVAL 3 Oct 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006147
SCALE # | WT # | SHEET 1 OF 2

1006147

REVISIONS 03649			
SYM	DESCRIPTION	DATE	APPROVAL

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO.2
R1	1006750-43	RESISTOR	3000	±2%	1/4W	40311 THRU 40319	40321 THRU 40329
R2	-15		200				
R3	-22		390				
R4	1006788-24		2.1			40361 40362	40363 40364
R5	1006750-43		3000				
R6	-15		200				
R7	-32		1000				
R8	-49		5100				
R9	1006788-8		20	±1%			
R10	-31		2.7				
R11	-31		2.7				
R12	1006750-28		680	±2%		40351	40354
R13	-39		2000				
R14	-39		2000				
R15	-35		1300				
R16	-35		1300				
R17	-15		200				
R18	-15		200				
R19	-15		200				
R20	-28		680			40352	40355
R21	-39		2000				
R22	-39		2000				
R23	-35		1300				
R24	-35		1300				
R25	-15		200				
R26	-15		200				
R27	-15		200				
R28	-43		3000			40331	40332A
R29	-15		200				
R30	-28		680				
R31	-39		2000				
R32	-39		2000				
R33	-39		2000				
R34	-28		680			40353	40356
R35	-39		2000				
R36	-39		2000				
R37	-35		1300				
R38	-35		1300				
R39	-15		200				
R40	-15		200				
R41	-15		200				
R42	-43		3000			40365	40366
R43	-43		3000			40367	40368
R44	-15		200				
R45	-32		1000				
R46	-49		5100				
R47	1006788-8		20	±1%			
R48	-31		2.7				
R49	-31		2.7				
C1	1006755-69	CAPACITOR	1 UF		35VDC	40365	40366
L1	1010406-10	COIL	2.2 UH			40311 THRU 40319	40321 THRU 40329
L2	-10		2.2 UH			40361 40362	40363 40364
L3	-10		2.2 UH				
L4	-10		2.2 UH			40367	40368
L5	-10		2.2 UH				

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON MODULE NO.1	CIRCUIT NO. USED ON MODULE NO 2
CR1	1006751	DIODE				40311 THRU 40319	40321 THRU 40329
CR2							
CR3						40361 40362	40363 40364
CR4							
CR5							
CR6							
CR7						40351	40354
CR8							
CR9							
CR10							
CR11							
CR12							
CR13							
CR14							
CR15							
CR16							
CR17							
CR18						40352	40355
CR19							
CR20							
CR21							
CR22							
CR23							
CR24							
CR25							
CR26							
CR27							
CR28							
CR29						40353	40356
CR30							
CR31							
CR32							
CR33							
CR34							
CR35							
CR36							
CR37							
CR38							
CR39							
CR40						40365	40366
CR41						40367	40368
CR42							
CR43							
CR44							
Q1	1006752	TRANSISTOR				40311 THRU 40319	40321 THRU 40329
Q2	1006759						
Q3	1006752					40361 40362	40363 40364
Q4	1006752						
Q5	1006759						
Q6	1006759					40351	40354
Q7	1006753						
Q8	1006759						
Q9							
Q10							
Q11	1006753					40352	40355
Q12	1006759						
Q13							
Q14							
Q15	1006752					40331	40332A
Q16	1006753						
Q17	1006759						
Q18	1006753					40353	40356
Q19	1006759						
Q20							
Q21							
Q22	1006752					40367	40368
Q23	1006752						
Q24	1006759						
Q25							

1006147

MASTER

CTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS			

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
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MATERIAL —
HEAT TREATMENT —
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CAMBRIDGE, MASS
DWG. NO. CONTRACT
DRAWN A. Di Leo DATE 28 Aug 63
CHECKED
APPROVAL DJ Bowler 2 Oct 63
APPROVAL Eldon C. Hall 2 Oct 63
NASA APPROVAL W J Rhine 10-3-63
MIT APPROVAL W Kupfer 3 Oct 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
ROPE DRIVER MODULE
B32-B33

CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006147
SCALE — | WT — | SHEET 2 OF 2

REVISIONS 04147			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	1-1-63	

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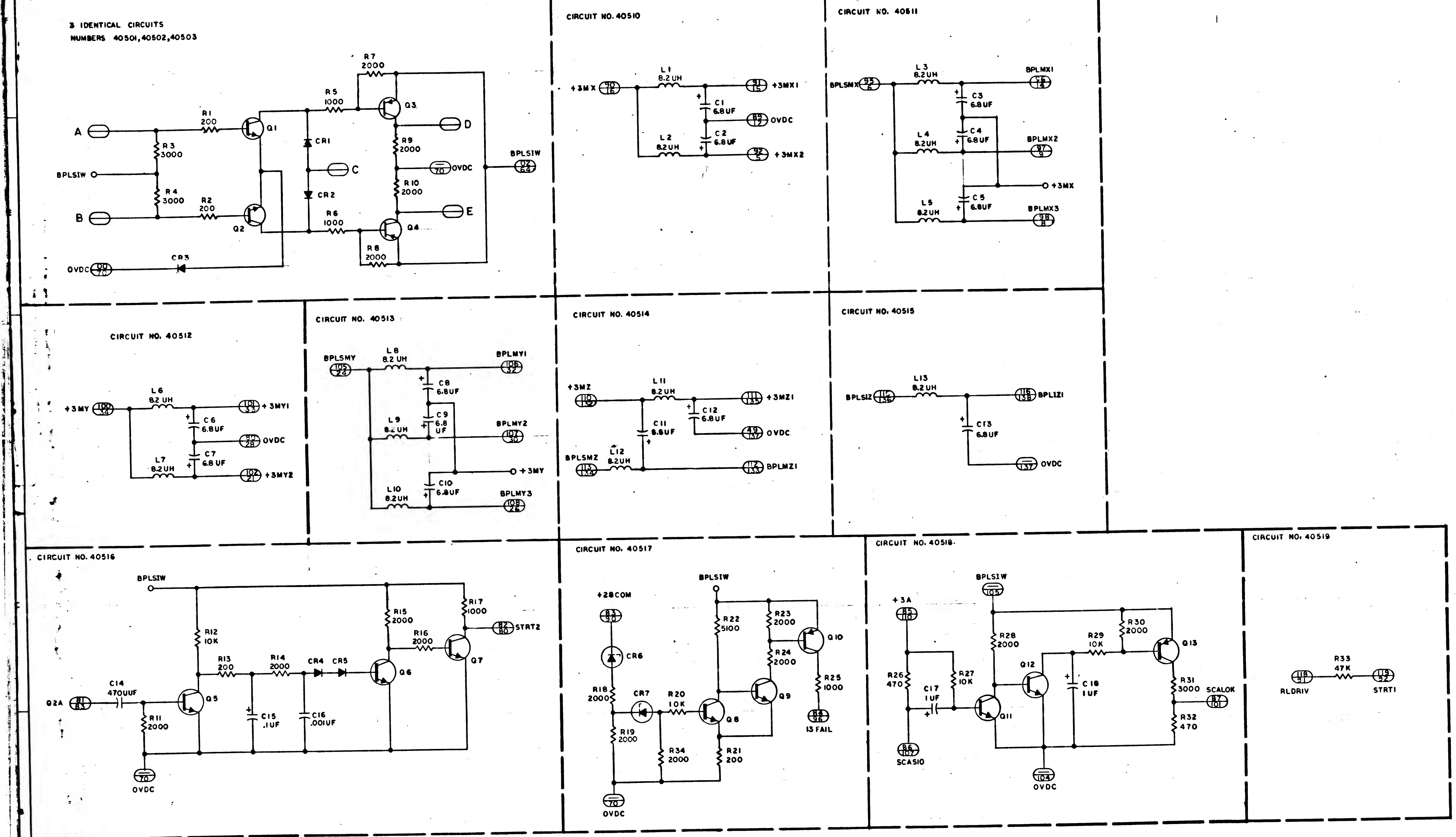

NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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APPROVAL
APPROVAL 23 Oct 63
NASA APPROVAL
MIT APPROVAL 24 Oct

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC, STRAND GATE MODULE B31

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006148
SCALE #
WT #
SHEET 1 OF 2

1006148

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REVISIONS 04147

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478		

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750 -15	RESISTOR	200	±2%	1/4W	40501 40502 40503
R2	-15		200			
R3	-43		3000			
R4	-43		3000			
R5	-32		1000			
R6	-32		1000			
R7	-39		2000			
R8	-39		2000			
R9	-39		2000			
R10	-39		2000			
R11	-39		2000			40516
R12	-56		10K			
R13	-15		200			
R14	-39		2000			
R15	-39		2000			
R16	-39		2000			
R17	-32		1000			
R18	-39		2000			40517
R19	-39		2000			
R20	-56		10K			
R21	-15		200			
R22	-49		5100			
R23	-39		2000			
R24	-39		2000			
R25	-32		1000			
R26	-24		470			40518
R27	-56		10K			
R28	-39		2000			
R29	-56		10K			
R30	-39		2000			
R31	-43		3000			
R32	-24		470			
R33	-72		47K			40519
R34	↓ -39	↓	2000	↓	↓	40517
C1	1006755 -79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2	-					
C3	-					40511
C4	-					
C5	-					
C6	-					40512
C7	-					
C8	-					40513
C9	-					
C10	-					
C11	-					40514
C12	↓ - ↓		↓		↓	
C13	1006755 -79		6.8UF		35VDC	40515
C14	1006777 -20		470UUF		100VDC	40516
C15	1006755 -57		0.1UF		35VDC	
C16	1006777 -24		.001UF		100VDC	
C17	1006755 -69		1.0 UF		35 VDC	40518
C18	1006755 -69	↓	1.0 UF	↓	35VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
L1	1010406-7	INDUCTOR	8.2UH			40510
L2						
L3						40511
L4						
L5						
L6						40512
L7						
L8						40513
L9						
L10						
L11						40514
L12						
L13	↓	↓	↓			40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4	↓					40516
CR5	1006751					
CR6	1006838					40517
CR7	1006838	↓				
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9	↓					
Q10	1006753					
Q11	1006752					40518
Q12	1006752					
Q13	1006753	↓				

MASTER

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LIST OF MATERIALS

NEXT ASSY	USED ON

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DWG NO. CONTRACT
DRAWN A. Di Leo DATE
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APPROVAL
APPROVAL [redacted]
NASA APPROVAL
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MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
STRAND GATE MODULE B31

CODE IDENT NO. — SIZE E NASA DRAWING NO. 1006148
SCALE — WT — SHEET 2 OF 2

1006148 A

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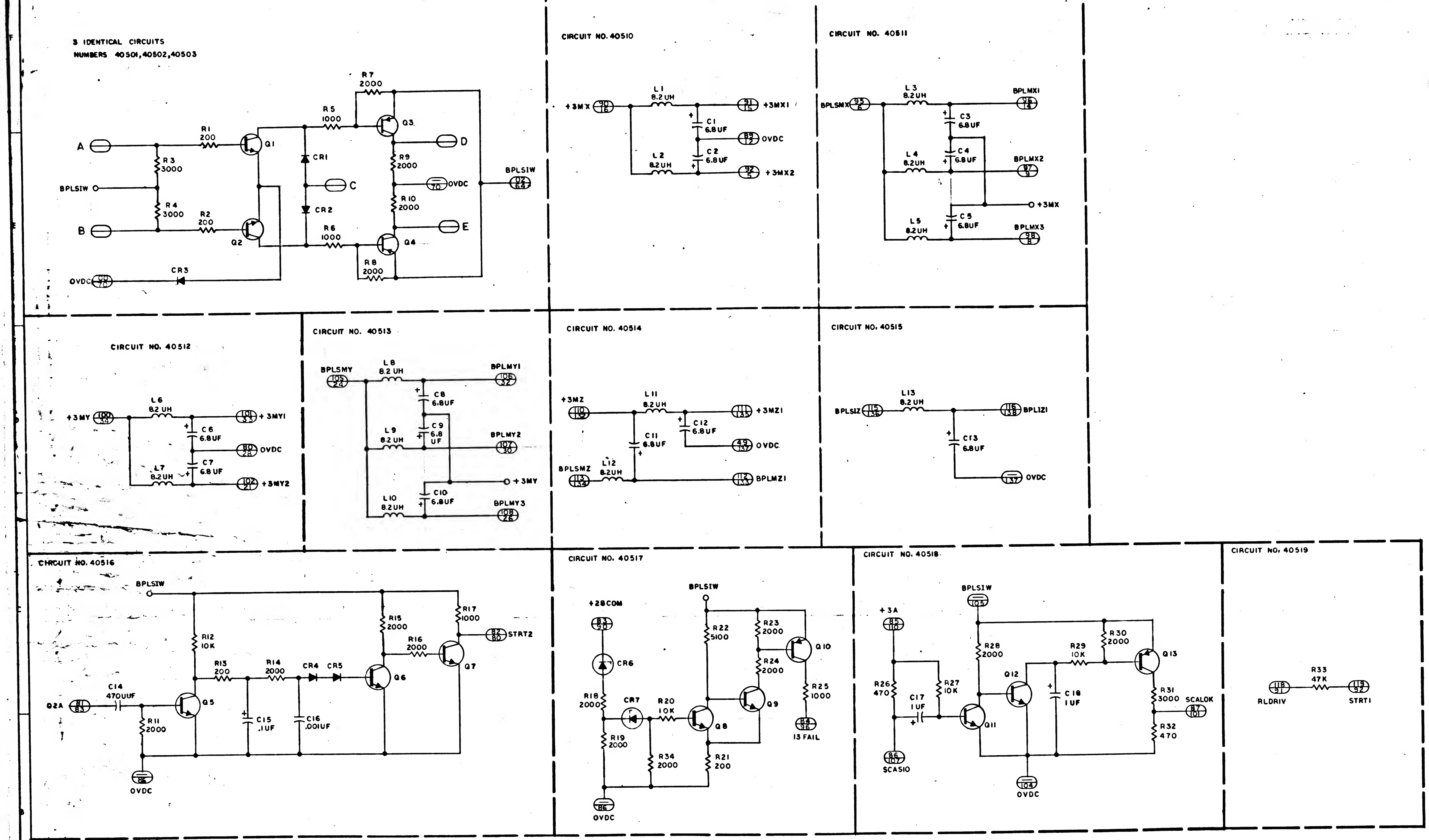
REVISIONS 04147

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	11-6-63	
B	REVISED PER TDRR 06046		



NOTES:

1. ~~INTERPRET~~ DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

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CAMBRIDGE, MASS
DWG NO. CONTRACT
DRAWN A. Di Leo DATE 4 SEP 63
CHECKED
APPROVAL
APPROVAL 28 Oct 63
NASA APPROVAL 10/24/63
MIT APPROVAL Oct 24 63

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

SCHEMATIC,
STRAND GATE MODULE B31

CODE IDENT NO. | SIZE E | NASA DRAWING NO 1006148
SCALE # | WT # | SHEET 1 OF 2

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REVISIONS 64197

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478		
B	REVISED PER TDRR 36046		

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750 - 15	RESISTOR	200	± 2%	1/4 W	40501 40502 40503
R2	- 15		200			
R3	- 43		3000			
R4	- 43		3000			
R5	- 32		1000			
R6	- 32		1000			
R7	- 39		2000			
R8	- 39		2000			
R9	- 39		2000			
R10	- 39		2000			
R11	- 39		2000			40516
R12	- 56		10K			
R13	- 15		200			
R14	- 39		2000			
R15	- 39		2000			
R16	- 39		2000			
R17	- 32		1000			
R18	- 39		2000			40517
R19	- 39		2000			
R20	- 56		10K			
R21	- 15		200			
R22	- 49		5100			
R23	- 39		2000			
R24	- 39		2000			
R25	- 32		1000			
R26	- 24		470			40518
R27	- 56		10K			
R28	- 39		2000			
R29	- 56		10K			
R30	- 39		2000			
R31	- 43		3000			
R32	- 24		470			
R33	- 72		47K			40519
R34	↓ - 39	↓	2000	↓	↓	40517
C1	1006755 - 79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2	-					
C3	-					40511
C4	-					
C5	-					
C6	-					40512
C7	-					
C8	-					40513
C9	-					
C10	-					
C11	-					40514
C12	↓ - ↓		↓		↓	
C13	1006755 - 79		6.8UF		35VDC	40515
C14	1006777 - 20		470UUF		100VDC	40516
C15	1006755 - 57		0.1UF		35VDC	
C16	1006777 - 24		.001UF		100VDC	
C17	1006755 - 69		1.0 UF		35 VDC	40518
C18	1006755 - 69	↓	1.0 UF	↓	35VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL.	RATING	CIRCUIT NO. USED ON
L1	1010406 - 7	INDUCTOR	8.2UH			40510
L2						
L3						40511
L4						
L5						
L6						40512
L7						
L8						40513
L9						
L10						
L11						40514
L12						
L13	↓	↓	↓			40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4	↓					40516
CR5	1006751					
CR6	1006838					40517
CR7	1006838	↓				
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9	↓					
Q10	1006753					40518
Q11	1C06752					
Q12	1006752					
Q13	1006753	↓				

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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HOUSTON, TEXAS

SCHEMATIC,
STRAND GATE MODULE 331

CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006148
SCALE — WT — SHEET 2 OF 2

1006148

INCHES
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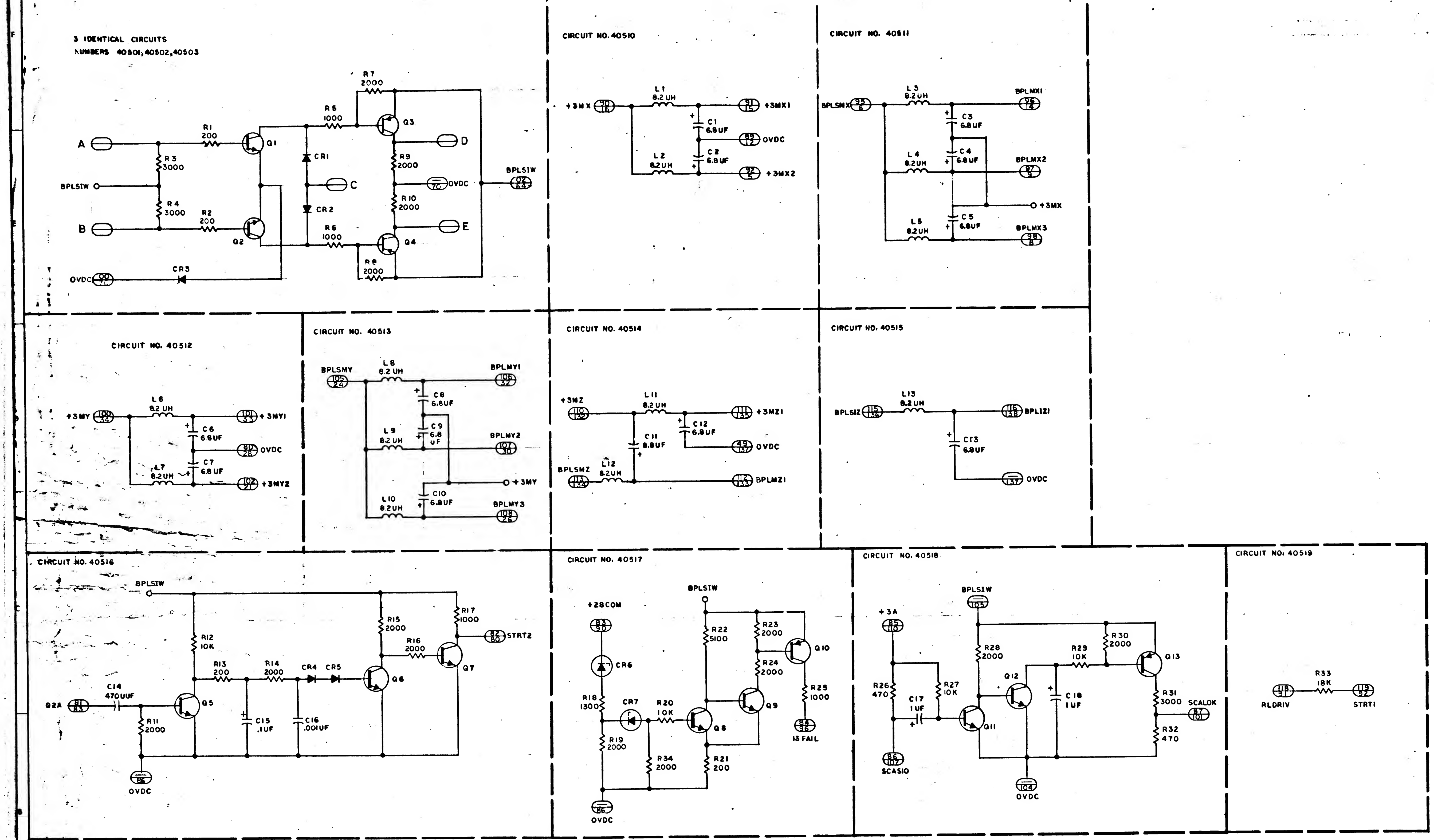
REVISIONS 04147			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	11-4-63	
B	REVISED PER TDRR 06046		
C	REVISED PER TDRR 05232	16FEB64	



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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CONTRACT
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APPROVAL
APPROVAL 23 Oct 63
NASA APPROVAL
MIT APPROVAL

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HOUSTON, TEXAS

SCHEMATIC, STRAND GATE MODULE B31

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006148
SCALE —
WT —
SHEET 1 OF 2

1006148 C

INCHES
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SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	11-4-63	
B	REVISED PER TDRR 06046		
C	REVISED PER TDRR 06232	18FEB64	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750 - 15	RESISTOR	200	±2%	1/4W	40501 40502 40503
R2	-15		200			
R3	-43		3000			
R4	-43		3000			
R5	-32		1000			
R6	-32		1000			
R7	-39		2000			
R8	-39		2000			
R9	-39		2000			
R10	-39		2000			
R11	-39		2000			40516
R12	-56		10K			
R13	-15		200			
R14	-39		2000			
R15	-39		2000			
R16	-39		2000			
R17	-32		1000			
R18	-35		1300			40517
R19	-39		2000			
R20	-56		10K			
R21	-15		200			
R22	-49		5100			
R23	-39		2000			
R24	-39		2000			
R25	-32		1000			
R26	-24		470			40518
R27	-56		10K			
R28	-39		2000			
R29	-56		10K			
R30	-39		2000			
R31	-43		3000			
R32	-24		470			
R33	-62		18K			40519
R34	↓ -39	↓	2000	↓	↓	40517
C1	1006755 - 79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2	-					
C3	-					40511
C4	-					
C5	-					
C6	-					40512
C7	-					
C8	-					40513
C9	-					
C10	-					
C11	-					40514
C12	↓ - ↓		↓		↓	
C13	1006755 - 79		6.8UF		35VDC	40515
C14	1006777 - 20		470UUF		100VDC	40516
C15	1006755 - 57		0.1UF		35VDC	
C16	1006777 - 24		.001UF		100VDC	
C17	1006755 - 69		1.0UF		35VDC	40518
C18	1006755 - 69	↓	1.0UF	↓	35VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
L1	1010406 - 7	INDUCTOR	8.2UH			40510
L2						
L3						40511
L4						
L5						
L6						40512
L7						
L8						40513
L9						
L10						
L11						40514
L12						
L13	↓	↓	↓			40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4	↓					40516
CR5	1006751					
CR6	1006838					40517
CR7	1006838	↓				
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9	↓					
Q10	1006753					
Q11	1006752					40518
Q12	1006752					
Q13	1006753	↓				

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

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HOUSTON, TEXAS

SCHEMATIC, STRAND GATE MODULE B31

CODE IDENT NO. — SIZE E NASA DRAWING NO. 1006148
SCALE — WT — SHEET 2 OF 2

1006148 C

INCHES
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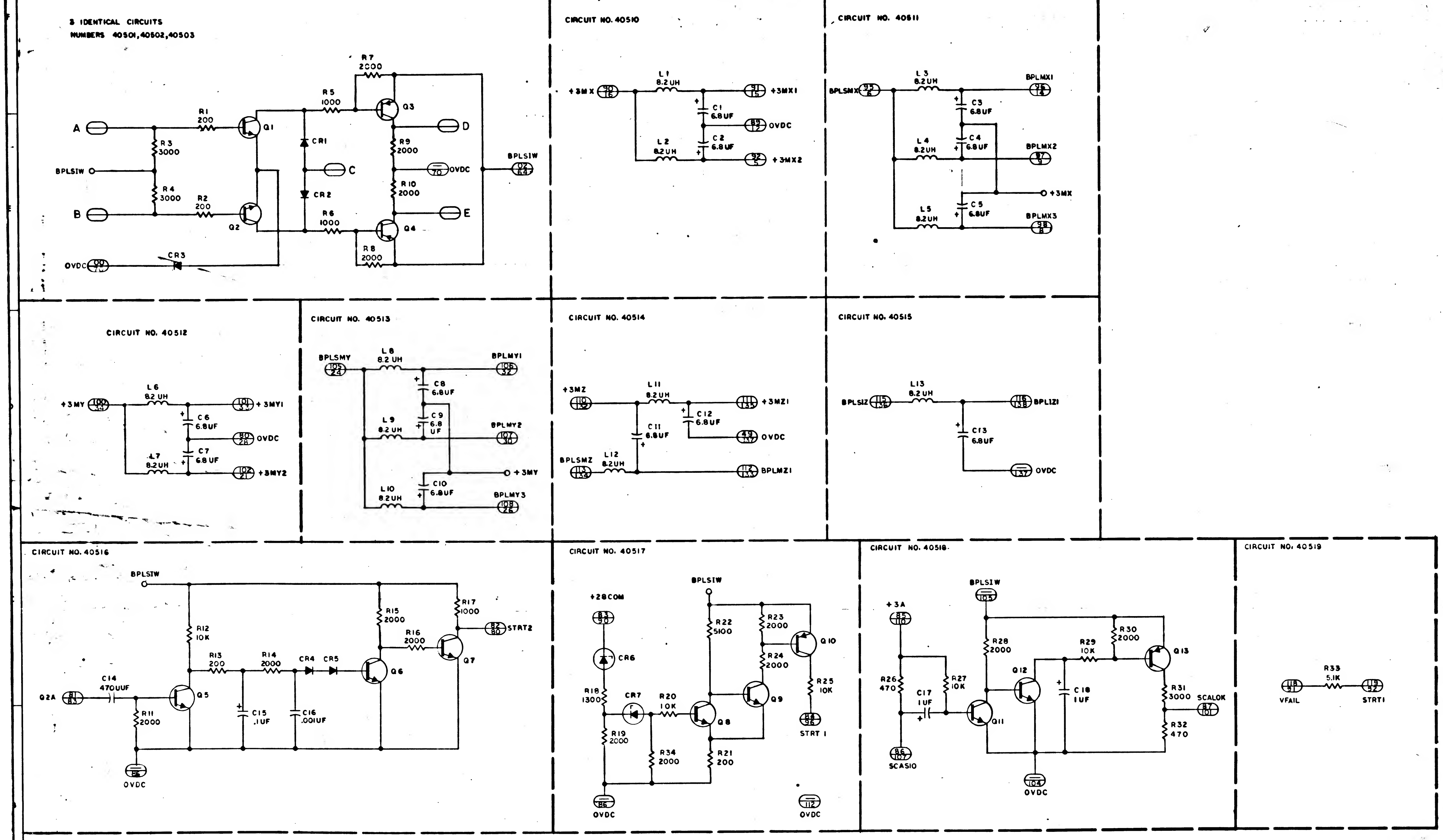
REVISIONS 04147			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	11-4-6-	
B	REVISED PER TDRR 06046		
C	REVISED PER TDRR 06232		
D	REVISED PER TDRR 07269 DR Clement CHK	5/29/64	



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

NEXT ASSY	USED ON
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SCHEMATIC,
STRAND GATE MODULE B31

CODE IDENT NO
SIZE E
NASA DRAWING NO. 1006148
SCALE — WT — SHEET 1 OF 2

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REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	[illegible]	[illegible]
B	REVISED PER TDRR 06046	[illegible]	[illegible]
C	REVISED PER TDRR 06232	10FEB64	[illegible]
D	REVISED PER TDRR 07269 DR [illegible] CHK [illegible]	3/23/64	[illegible]

REF DES	PART NO.		DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750	-15	RESISTOR	200	±2%	1/4W	40501 40502 40503
R2		-15		200			
R3		-43		3000			
R4		-43		3000			
R5		-32		1000			
R6		-32		1000			
R7		-39		2000			
R8		-39		2000			
R9		-39		2000			
R10		-39		2000			
R11		-39		2000			40516
R12		-56		10K			
R13		-15		200			
R14		-39		2000			
R15		-39		2000			
R16		-39		2000			
R17		-32		1000			
R18		-35		1300			40517
R19		-39		2000			
R20		-56		10K			
R21		-15		200			
R22		-49		5100			
R23		-39		2000			
R24		-39		2000			
R25		-56		10K			
R26		-24		470			40518
R27		-56		10K			
R28		-39		2000			
R29		-56		10K			
R30		-39		2000			
R31		-43		3000			
R32		-24		470			
R33		-49		5.1K			40519
R34	↓	-39	↓	2000	↓	↓	40517
C1	1006755	-79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2		-					
C3		-					40511
C4		-					
C5		-					
C6		-					40512
C7		-					
C8		-					40513
C9		-					
C10		-					
C11		-					40514
C12	↓	- ↓		↓		↓	
C13	1006755	-79		6.8UF		35VDC	40515
C14	1006777	-20		470UUF		100VDC	40516
C15	1006755	-57		0.1UF		35VDC	
C16	1006777	-24		.001UF		100VDC	
C17	1006755	-69		1.0UF		35VDC	40518
C18	1006755	-69	↓	1.0UF	↓	35VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
L1	1010406-7	INDUCTOR	8.2UH			40510
L2						
L3						40511
L4						
L5						
L6						40512
L7						
L8						40513
L9						
L10						
L11						40514
L12						
L13	↓	↓	↓			40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4	↓					40516
CR5	1006751					
CR6	1006838					40517
CR7	1006838	↓				
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9	↓					
Q10	1006753					
Q11	1006752					40518
Q12	1006752					
Q13	1006753	↓				

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON
APPLICATION	

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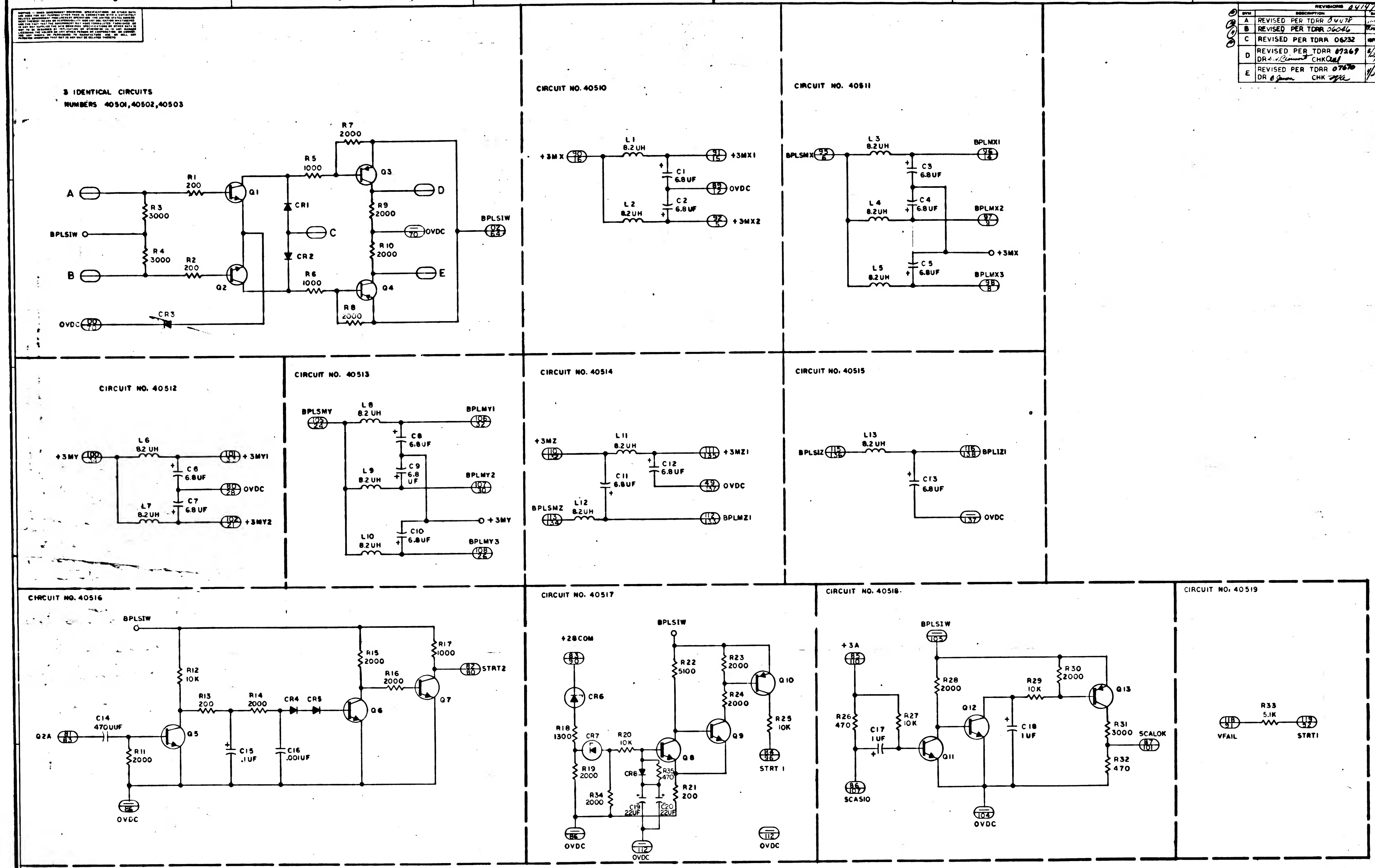
SCHEMATIC,
STRAND GATE MODULE B31

CODE IDENT NO. — SIZE E NASA DRAWING NO. 1006148
SCALE — WT — SHEET 2 OF 2

SYM	DESCRIPTION	DATE	APPROVAL
	REVISIONS 04147		
A	REVISED PER TDRR 04478	11-4-63	
B	REVISED PER TDRR 06046		
C	REVISED PER TDRR 06232		
D	REVISED PER TDRR 07269 DR CHK	8/22/64	HLC
E	REVISED PER TDRR 07670 DR CHK	9/23/64	HLC



NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± — DECIMALS ± — ANGLES ± —
DO NOT SCALE THIS DRAWING
MATERIAL —
HEAT TREATMENT —
FINAL FINISH —

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SCHEMATIC, STRAND GATE MODULE B31

CODE IDENT NO.
SIZE E
NASA DRAWING NO. 1006148
SCALE — WT — SHEET 1 OF 2

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REVISIONS 04197

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04478	11-4-63	
B	REVISED PER TDRR 06046	[illegible]	
C	REVISED PER TDRR 06232	10FEB64	
D	REVISED PER TDRR 07269 DR CHK	3/23/64	
E	REVISED PER TDRR 07670 DR B Jensen CHK	4/23/64	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750 - 15	RESISTOR	200	±2%	1/4W	40501 40502 40503
R2	-15		200			
R3	-43		3000			
R4	-43		3000			
R5	-32		1000			
R6	-32		1000			
R7	-39		2000			
R8	-39		2000			
R9	-39		2000			
R10	-39		2000			
R11	-39		2000			40516
R12	-56		10K			
R13	-15		200			
R14	-39		2000			
R15	-39		2000			
R16	-39		2000			
R17	-32		1000			
R18	-35		1300			40517
R19	-39		2000			
R20	-56		10K			
R21	-15		200			
R22	-49		5100			
R23	-39		2000			
R24	-39		2000			
R25	-56		10K			
R26	-24		470			40518
R27	-56		10K			
R28	-39		2000			
R29	-56		10K			
R30	-39		2000			
R31	-43		3000			
R32	-24		470			
R33	-49		5.1K			40519
R34	-39		2000			40517
R35	↓ -24	↓	470	↓	↓	
C1	1006755 - 79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2	-					
C3	-					40511
C4	-					
C5	-					
C6	-					40512
C7	-					
C8	-					40513
C9	-					
C10	-					
C11	-					40514
C12	↓ - ↓		↓		↓	
C13	1006755 - 79		6.8UF		35VDC	40515
C14	1006777 - 20		470UUF		100VDC	40516
C15	1006755 - 57		0.1UF		35VDC	
C16	1006777 - 24		.001UF		100VDC	
C17	1006755 - 69		1.0 UF		35VDC	40518
C18	1006755 - 69		1.0 UF		35VDC	
C19	1006755 -134		22 UF		50VDC	40517
C20	1006755 -134	↓	22 UF	↓	50VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
L1	1010406-7	INDUCTOR	8.2UH			40510
L2						
L3						40511
L4						
L5						
L6						40512
L7						
L8						40513
L9						
L10						
L11						40514
L12						
L13	↓	↓	↓			40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4	↓					40516
CR5	1006751					
CR6	1006838					40517
CR7	1006838					
CR8	1006751	↓				
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9	↓					
Q10	1006753					
Q11	1006752					40518
Q12	1006752					
Q13	1006753	↓				

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

LIST OF MATERIALS

NEXT ASSY	USED ON

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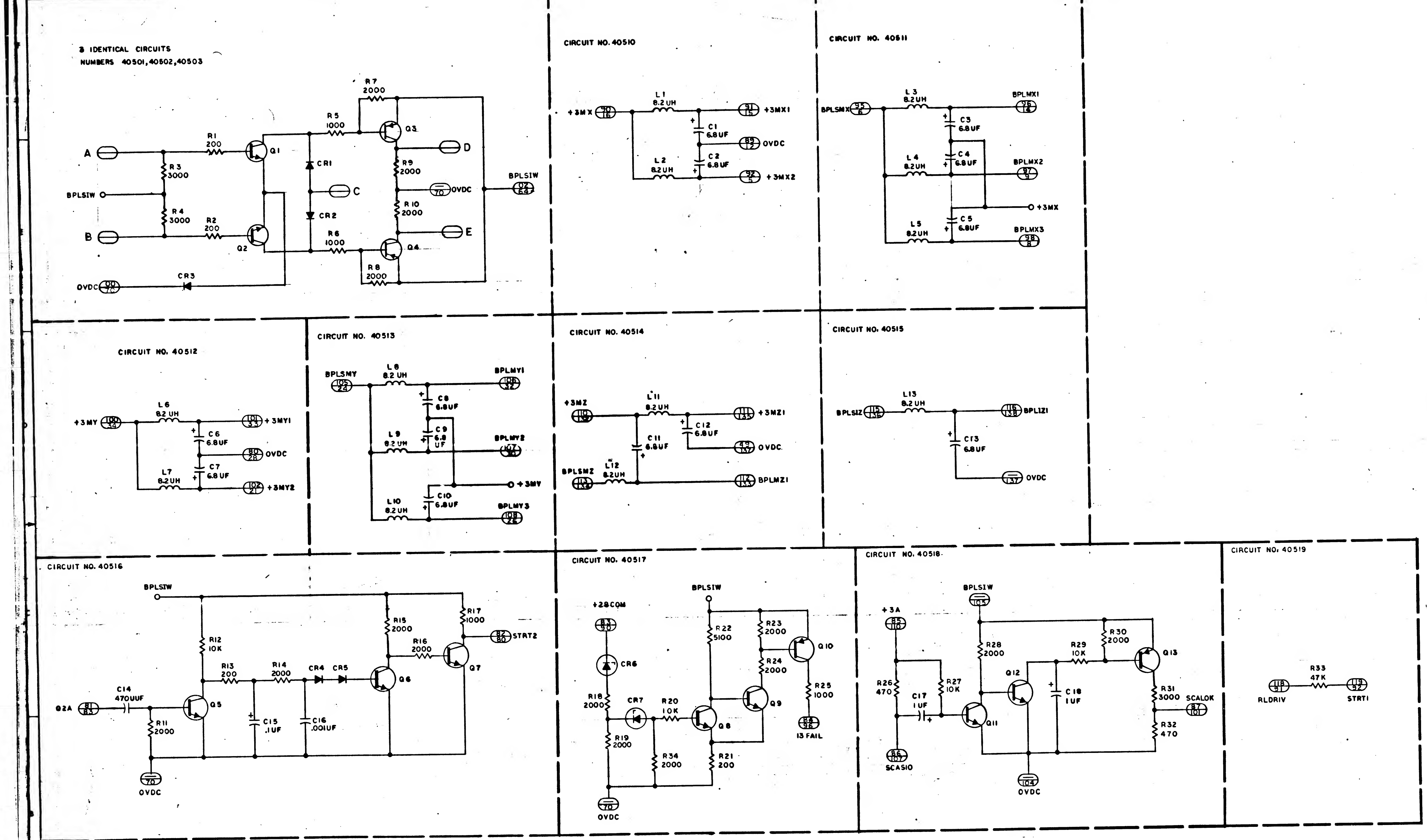
SCHEMATIC, STRAND GATE MODULE B31

CODE IDENT NO. — SIZE E NASA DRAWING NO. 1006148
SCALE — WT — SHEET 2 OF 2

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. UNLESS OTHERWISE SPECIFIED, RESISTOR VALUES ARE IN OHMS

COMPONENT PREFIX (ASSY)	CIRCUIT NO.	A			B			C			D			E		
		SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5	SIG	PIN NO. AGC 4	PIN NO. AGC 5
1	40501	RPG1	10	49	RPG4	13	47	GATER	20	53	GTRS	30	57	GTUS	33	55
2	40502	RPG2	11	61	RPG5	14	59	GATES	21	65	GTSS	31	69	GTVS	34	67
3	40503	RPG3	12	73	RPG6	15	71	GATET	22	77	GTTS	32	81	GTWS	35	79

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON
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SCHEMATIC,
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CODE IDENT NO. | SIZE E | NASA DRAWING NO. 1006148
SCALE — | WT — | SHEET 1 OF 2

1006148

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REVISIONS 64147

SYM	DESCRIPTION	DATE	APPROVAL

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
R1	1006750 - 15	RESISTOR	200	± 2%	1/4W	40501 40502 40503
R2	- 15		200			
R3	- 43		3000			
R4	- 43		3000			
R5	- 32		1000			
R6	- 32		1000			
R7	- 39		2000			
R8	- 39		2000			
R9	- 39		2000			
R10	- 39		2000			
R11	- 39		2000			40516
R12	- 56		10K			
R13	- 15		200			
R14	- 39		2000			
R15	- 39		2000			
R16	- 39		2000			
R17	- 32		1000			
R18	- 39		2000			40517
R19	- 39		2000			
R20	- 56		10K			
R21	- 15		200			
R22	- 49		5100			
R23	- 39		2000			
R24	- 39		2000			
R25	- 32		1000			
R26	- 24		470			40518
R27	- 56		10K			
R28	- 39		2000			
R29	- 56		10K			
R30	- 39		2000			
R31	- 43		3000			
R32	- 24		470			
R33	- 72		47K			40519
R34	- 39		2000			40517
C1	1006755 - 79	CAPACITOR	6.8UF	±10%	35VDC	40510
C2	-					40511
C3	-					
C4	-					
C5	-					
C6	-					40512
C7	-					
C8	-					40513
C9	-					
C10	-					
C11	-					40514
C12	-					
C13	1006755 - 79		6.8UF		35VDC	40515
C14	1006777 - 20		470UUF		100VDC	405 6
C15	1006755 - 57		0.1UF		35VDC	
C16	1006777 - 24		.001UF		100VDC	
C17	1006755 - 69		1.0 UF		35 VDC	40518
C18	1006755 - 69		1.0 UF		35VDC	

REF DES	PART NO.	DESCRIPTION	VALUE	TOL	RATING	CIRCUIT NO. USED ON
L1	1010406 - 7	INDUCTOR	8.2UH			40510
L2						40511
L3						
L4						
L5						40512
L6						
L7						40513
L8						
L9						
L10						
L11						40514
L12						
L13						40515
CR1	1006751	DIODE				40501 40502 40503
CR2						
CR3						
CR4						40516
CR5	1006751					40517
CR6	1006838					
CR7	1006838					
Q1	1006752	TRANSISTOR				40501 40502 40503
Q2	1006752					
Q3	1006753					
Q4	1006753					
Q5	1006752					40516
Q6						
Q7						
Q8						40517
Q9						
Q10	1006753					
Q11	1006752					40518
Q12	1006752					
Q13	1006753					

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

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SCHEMATIC,
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CODE IDENT NO. —
SIZE E
NASA DRAWING NO. 1006148
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1006148

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SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04768	11-12-63	

REVISIONS 00312 10-30-?

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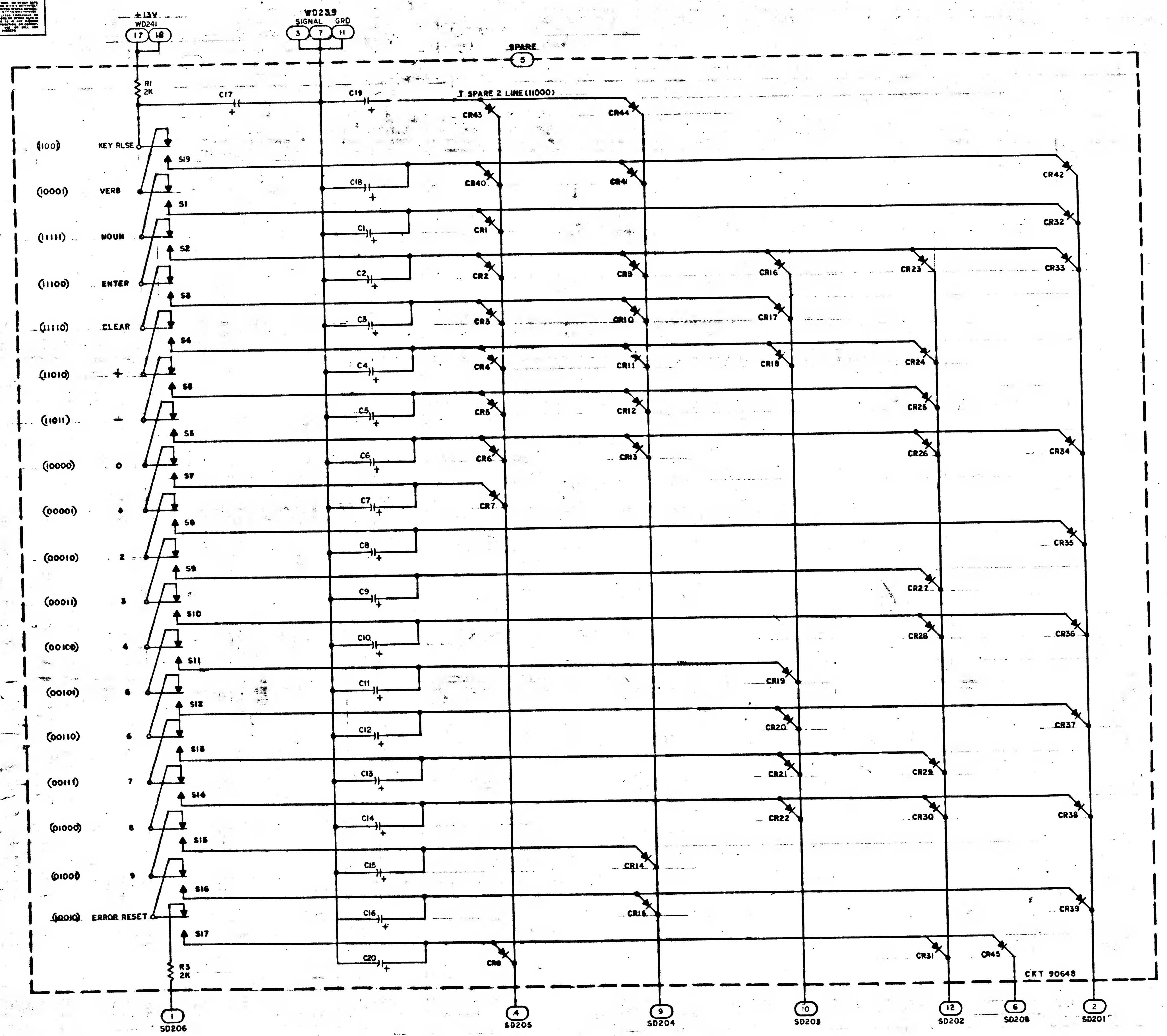
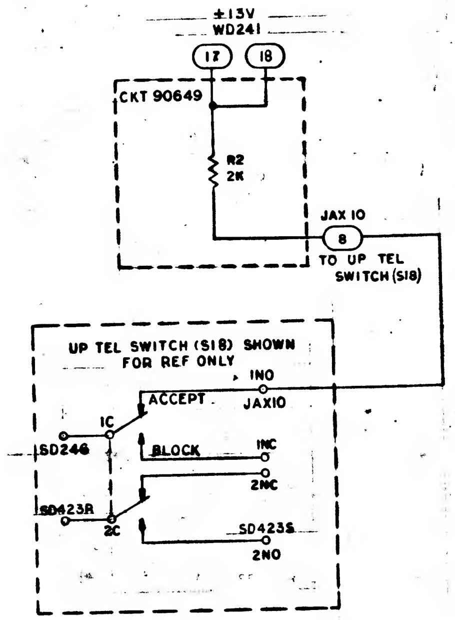


REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TCL	RATING
CR1 - CR45	1006751	DIODE			
S1 - S17, S19	1006821	SWITCH, PUSH			
C17	1006755-79	CAPACITOR, FIXED	6.8 µf	10%	35 V
R1 - R3	1006750-39	RESISTOR, FIXED FILM	2K	2%	1/4 W
C1-C16, C18, C19	1006755-57	CAPACITOR, FIXED	0.1 µf	10%	35V



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

REFERENCES
1. ASSEMBLY DRAWING 1003539

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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AGC DSKY, MAIN

CODE IDENT NO. ——
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NASA DRAWING NO. 1006150
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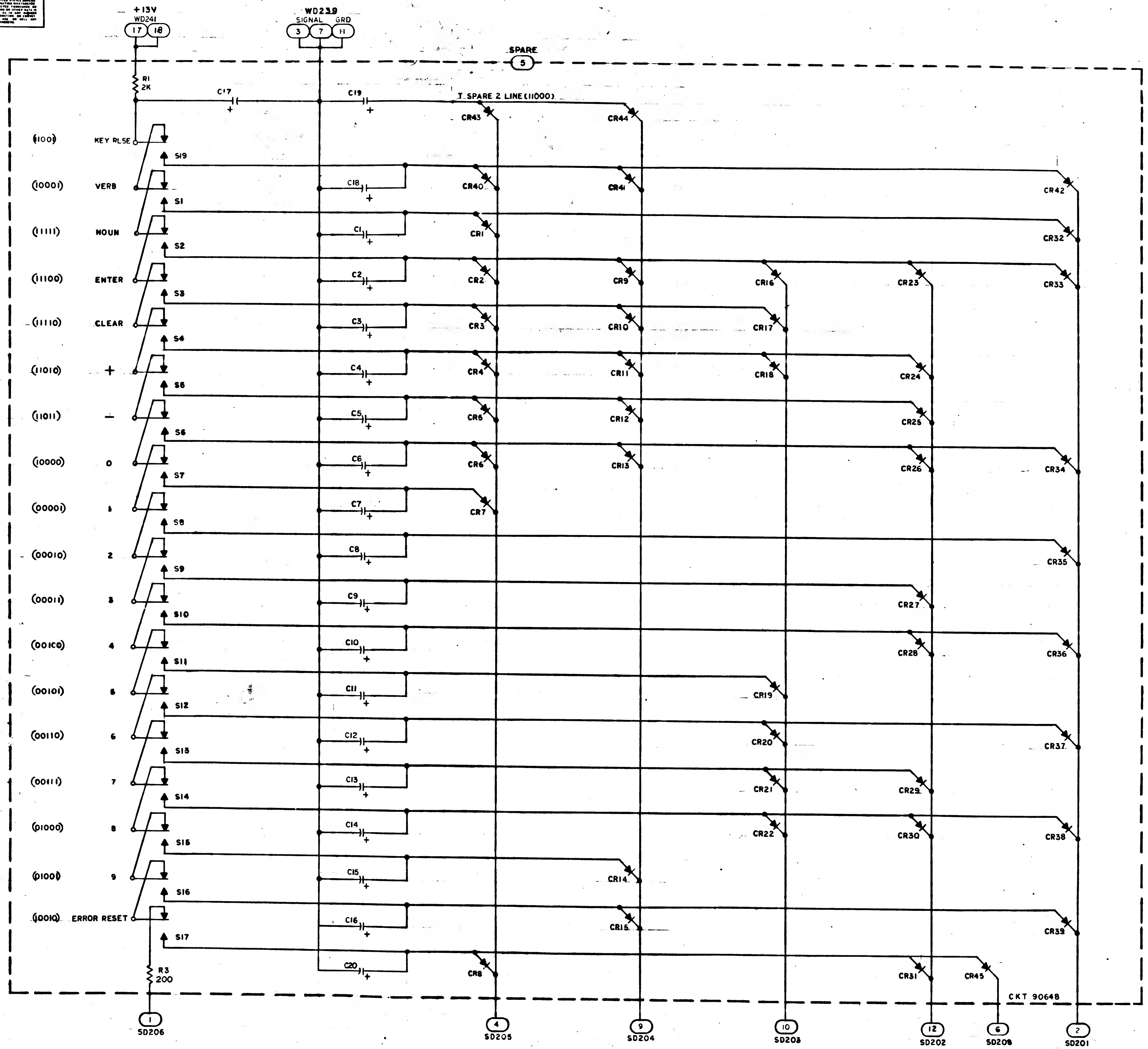
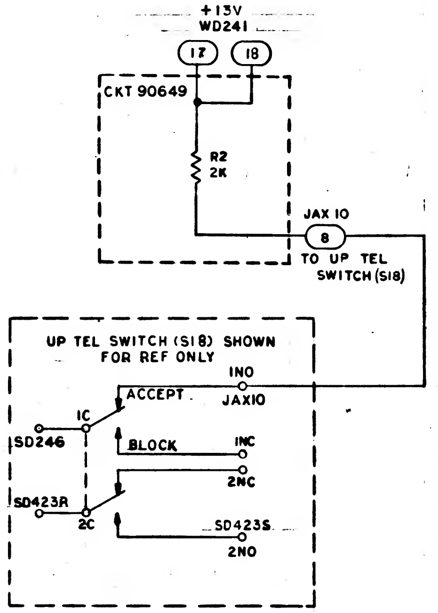
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04768	[illegible]	
B	REVISED PER TDRR 05791	1/21/64	



REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
CR1-CR45	1006751	DIODE			
S1-S17,S19	1006821	SWITCH, PUSH			
C17	1006755-79	CAPACITOR, FIXED	6.8 µf	10%	35 V
R1 - R2	1006750-39	RESISTOR, FIXED FILM	2K	2%	1/4 W
C1-C16,C18,C19	1006755-57	CAPACITOR, FIXED	0.1 µf	10%	35V
R3	1006750-15	RESISTOR, FIXED FILM	200	2%	1/4 W



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

REFERENCES
1. ASSEMBLY DRAWING 1003539

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			

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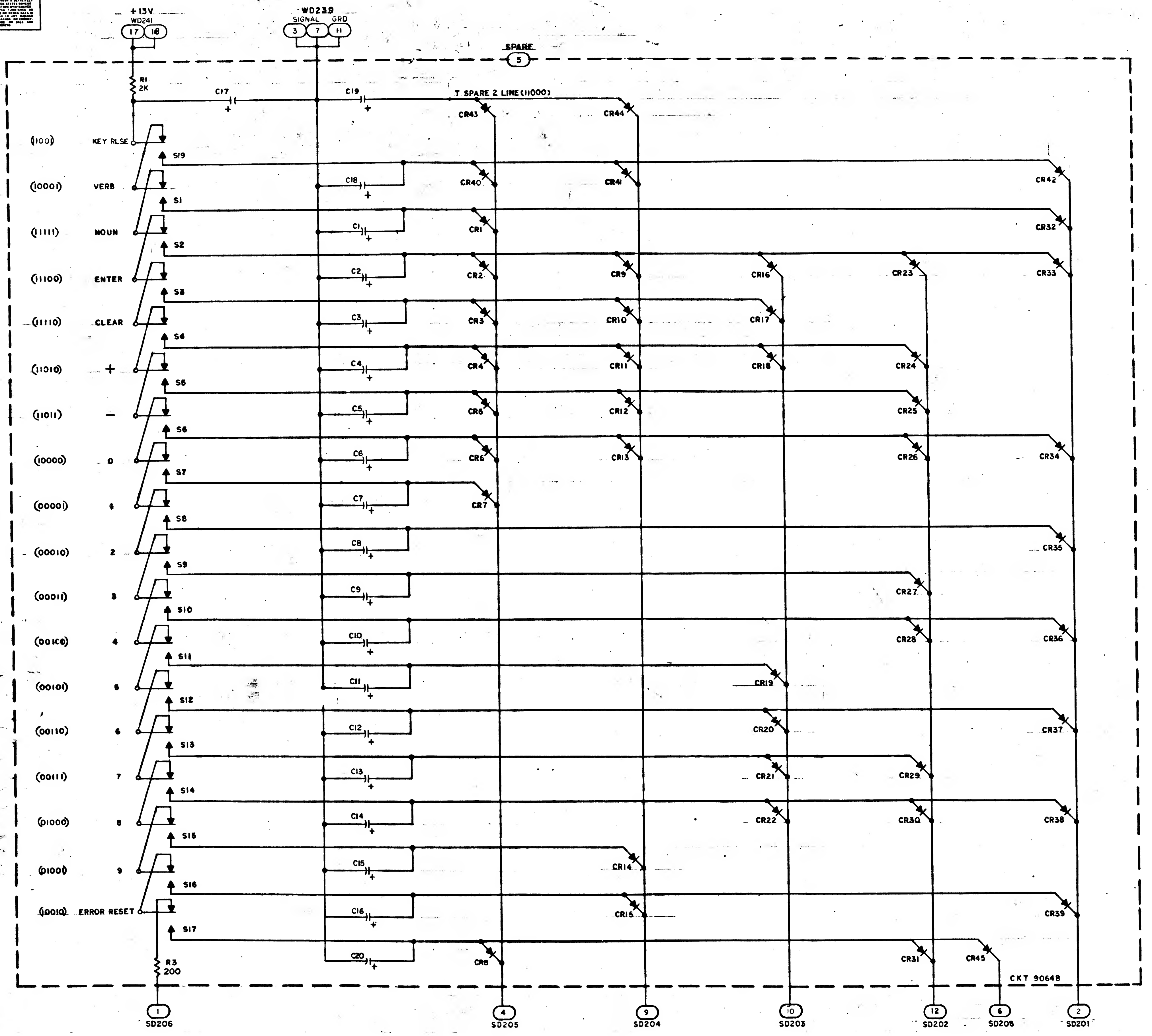
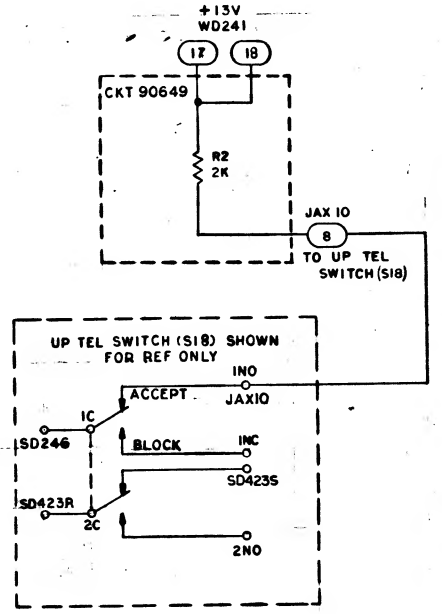
CODE IDENT NO. —— SIZE E NASA DRAWING NO. 1006150
SCALE NONE WT SHEET 1 OF 1

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04768	11-12-63	
B	REVISED PER TDRR 05791	1/21/64	
C	REVISED PER TDRR 06050		

REVISIONS 00312 10-30-63



REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
CR1 - CR45	1006751	DIODE			
S1 - S17, S19	1006821	SWITCH, PUSH			
C17	1006755-79	CAPACITOR, FIXED	6.8 µf	10%	35 V
R1 - R2	1006750-39	RESISTOR, FIXED FILM	2K	2%	1/4 W
C1-C16, C18, C19	1006755-57	CAPACITOR, FIXED	0.1 µf	10%	35V
R3	1006750-15	RESISTOR, FIXED FILM	200	2%	1/4 W



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

REFERENCES
1. ASSEMBLY DRAWING 1003539

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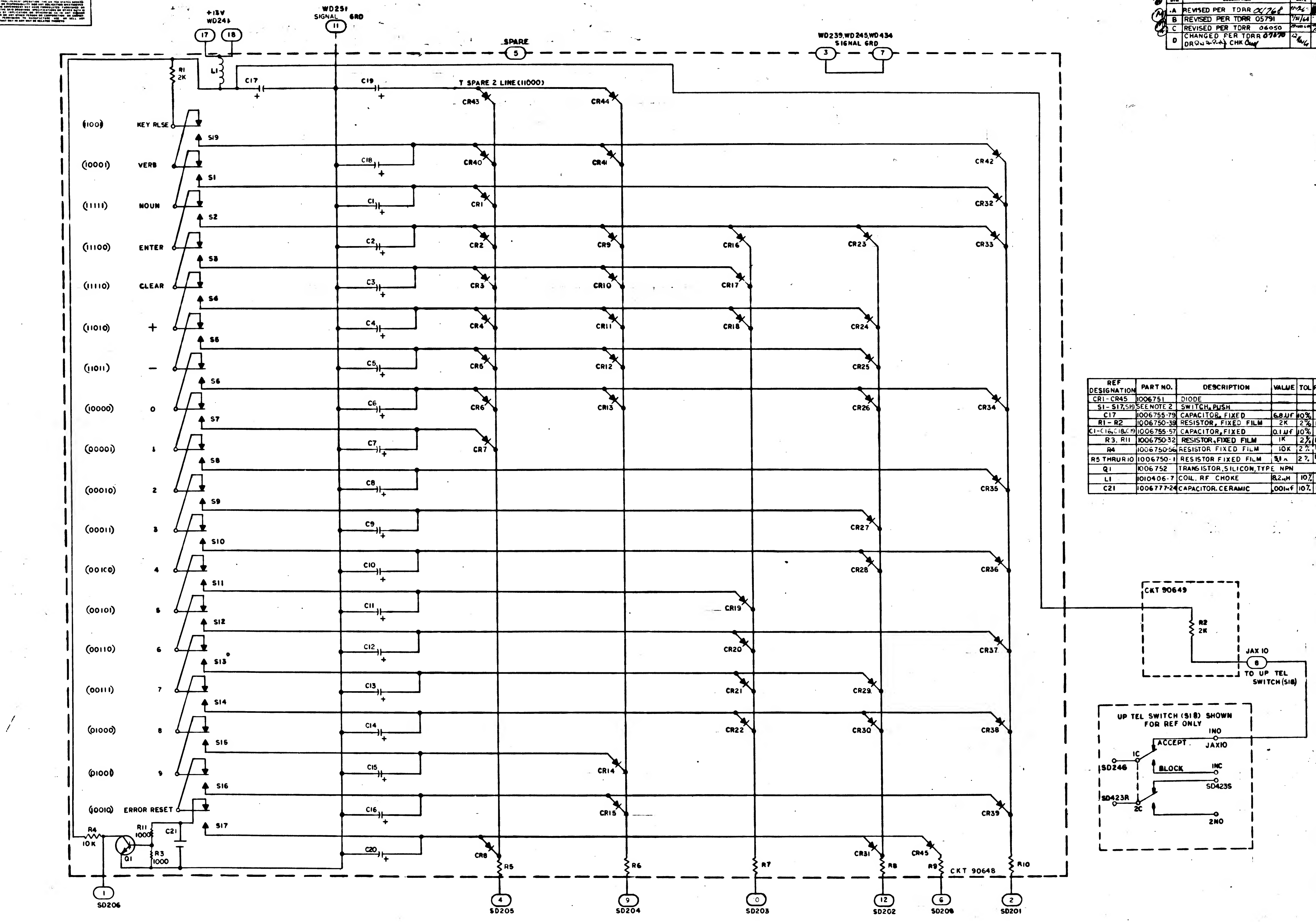
REVISIONS 30312 [illegible]

SYM	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TDRR 04768	[illegible]	[illegible]
B	REVISED PER TDRR 05791	1/21/64	[illegible]
C	REVISED PER TDRR 06050	[illegible]	RSR
D	CHANGED PER TDRR 07870 DR [illegible] CHK [illegible]	12 Nov 64	[illegible]



REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
CR1-CR45	1006751	DIODE	—		
S1-S17, S19	SEE NOTE 2	SWITCH, PUSH			
C17	1006755-79	CAPACITOR, FIXED	6.8 μf	10%	35 V
R1-R2	1006750-39	RESISTOR, FIXED FILM	2K	2%	1/4 W
C1-C16, C18, C19	1006755-57	CAPACITOR, FIXED	0.1 μf	10%	35V
R3, R11	1006750-32	RESISTOR, FIXED FILM	1K	2%	1/4 W
R4	1006750-56	RESISTOR FIXED FILM	10K	2%	1/4 W
R5 THRU R10	1006750-1	RESISTOR FIXED FILM	51 Ω	2%	1/4 W
Q1	1006752	TRANSISTOR, SILICON, TYPE NPN			
L1	1010406-7	COIL, RF CHOKE	8.2 μH	10%	
C21	1006777-24	CAPACITOR, CERAMIC	.001 μf	10%	100VDC

NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. SWITCH 1006821 USED IN ASSEMBLY 1003539
   SWITCH 1006738 USED IN ASSEMBLY 1003549

REFERENCES
1. ASSEMBLY DRAWING 1003539
   ASSEMBLY DRAWING 1003549

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO

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AGC DSKY, MAIN

CODE IDENT NO. —
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NASA DRAWING NO. 1006150
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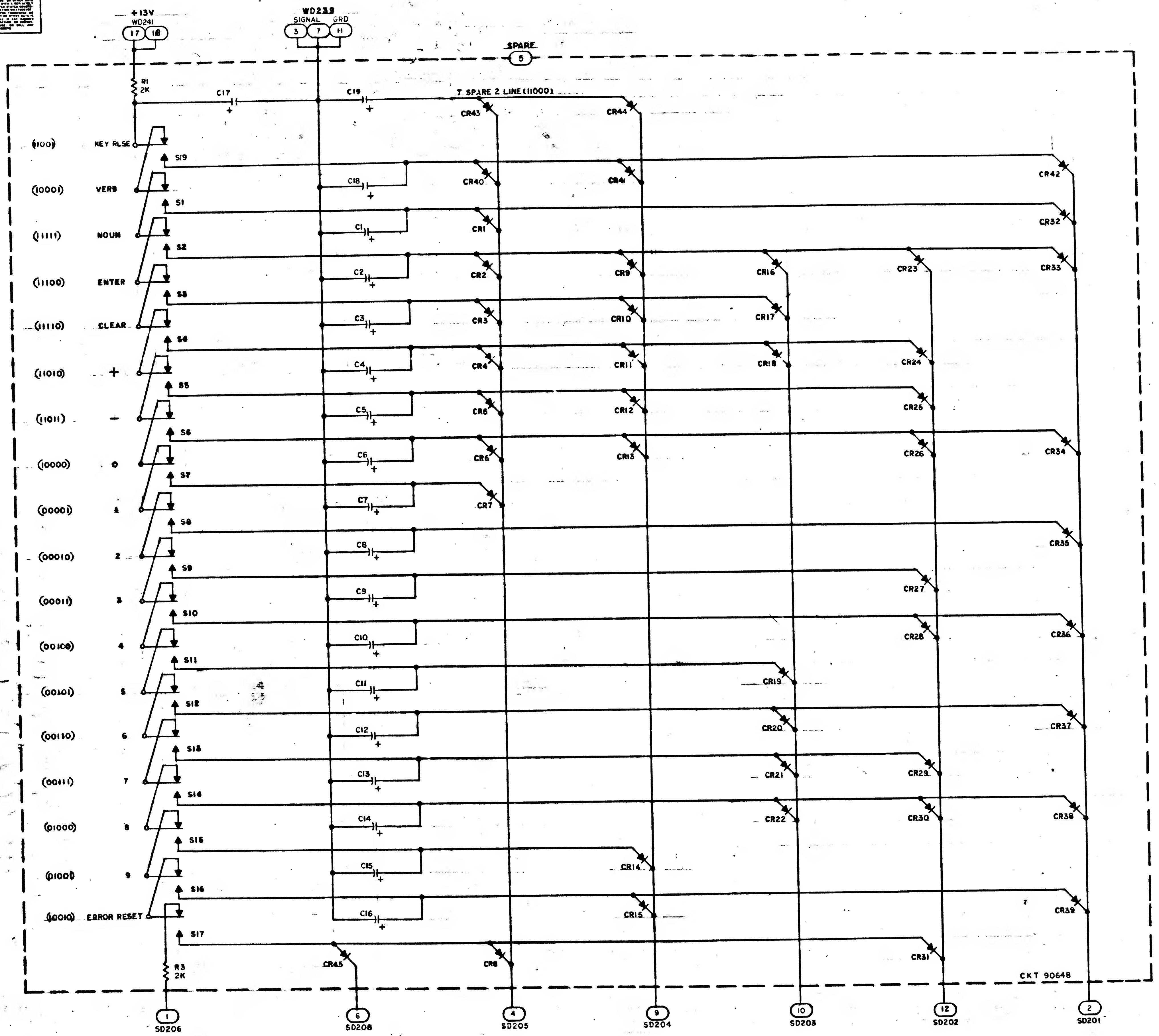
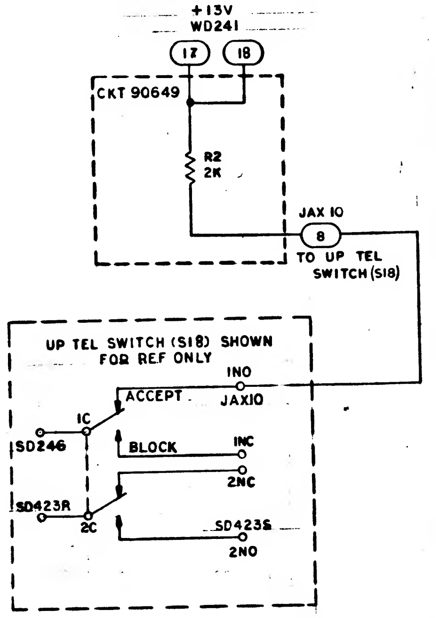
SYM	DESCRIPTION	DATE	APPROVAL



REF DESIGNATION	PART NO.	DESCRIPTION	VALUE	TOL	RATING
CR1 - CR45	1006751	DIODE			
S1 - S17, S19	1006821	SWITCH, PUSH			
C17	1006755-79	CAPACITOR, FIXED	6.8 µf	10%	35 V
R1 - R3	1006750-39	RESISTOR, FIXED FILM	2K	2%	1/4 W
C1-C16, C18, C19	1006755-57	CAPACITOR, FIXED	0.1 µf	10%	35V



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

REFERENCES
1. ASSEMBLY DRAWING 1003539

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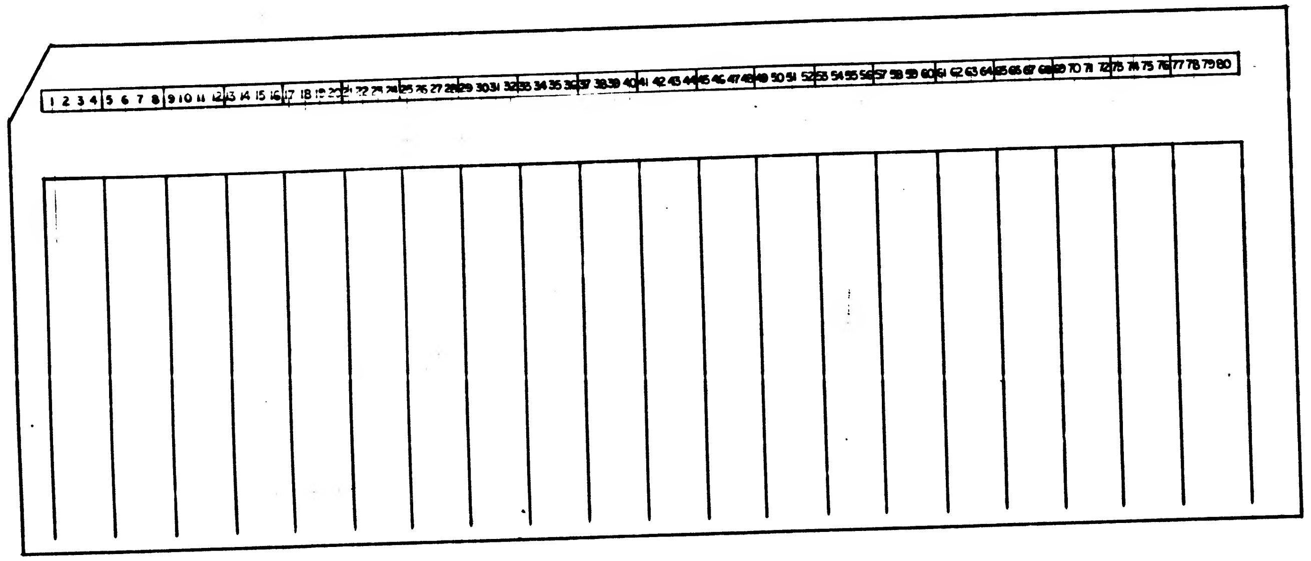
REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TDRR 05629	1/7/64	



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. CARD COLUMNS / USAGE

CARD COLUMNS	USAGE
2 – 7	CARD SEQUENCE NUMBER, IN DECIMAL
9 – 26	BINARY MACHINE DATA, IN THE FORMAT DESCRIBED BY GARDNER-DENVER CO. DRAWING NUMBER 820181, REVISION B, FOR THEIR MODEL 14F-15X15X.125 WIRE-WRAP MACHINE
27 – 33	SIGNAL NAME.
34 – 35	WIRE NUMBER IN CHAIN FOR SIGNAL.
36 – 42	NAME OF PIN WRAPPED BY A TOOL
43 – 49	NAME OF PIN WRAPPED BY B TOOL
50	WIRE PATTERN CODE NUMBER
51	TABLE ROTATIONAL POSITION
52	PALLET LONGITUDINAL POSITION
53	A TOOL Z LEVEL
54	B TOOL Z LEVEL
55 – 57	A TOOL X, IN DECIMAL
58 – 60	Y1, IN DECIMAL
61 – 63	B TOOL X, IN DECIMAL
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67 – 69	Y3, IN DECIMAL
70 – 72	Y4, IN DECIMAL
73 – 79	NASA DRAWING NUMBER OF COVER SHEET FOR DECK
80	REVISION LETER TO DRAWING NUMBER

REF DRAWING NUMBER 1003163

1006151 A

MASTER

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

MIT INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DWG. NO. CONTRACT
DRAWN DATE 20 Dec 63
CHECKED
APPROVAL
APPROVAL Eldon C Hall 7 Jan 64
NASA APPROVAL 1/7/64
MIT APPROVAL 1/7/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

WIREWRAP CARD
DECK-TRAY A L.H.

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006151
SCALE NONE
WT
SHEET 1 OF 1

INCHES
0 1 2
PHOTOGRAPHIC SCALE ONLY

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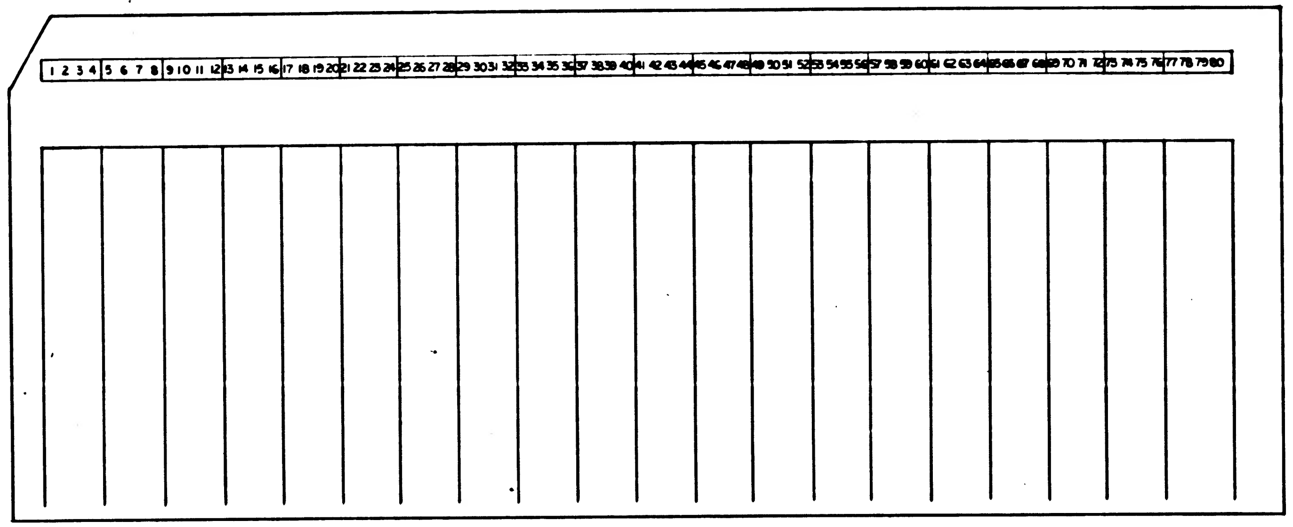
REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TDRR 05629	1/7/64	
B	REVISED PER TDRR 07513	4/7/69	WC



NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. CARD COLUMNS USAGE

CARD COLUMNS	USAGE
2 – 7	CARD SEQUENCE NUMBER, IN DECIMAL
9 – 22 USAGE	BINARY MACHINE DATA, IN THE FORMAT DESCRIBED BY A GARDNER-DENVER CO. DRAWING NUMBER 800384, REVISION A, FOR THEIR MODEL 14F-15X15X.125 WIRE-WRAP MACHINE
27 – 33	SIGNAL NAME.
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54	B TOOL Z LEVEL
55 – 57	A TOOL X, IN DECIMAL
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64 – 66	Y2, IN DECIMAL
67 – 69	Y3, IN DECIMAL
70 – 72	Y4, IN DECIMAL
73 – 79	NASA DRAWING NUMBER OF COVER SHEET FOR DECK
80	REVISION LETER TO DRAWING NUMBER

REF DRAWING NUMBER 1003163

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON
APPLICATION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
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INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO CONTRACT
DRAWN DATE 20 Dec 63
CHECKED
APPROVAL
APPROVAL Eldon C Hall 7 Jan 64
NASA APPROVAL 1/7/64
MIT APPROVAL 1/7/64

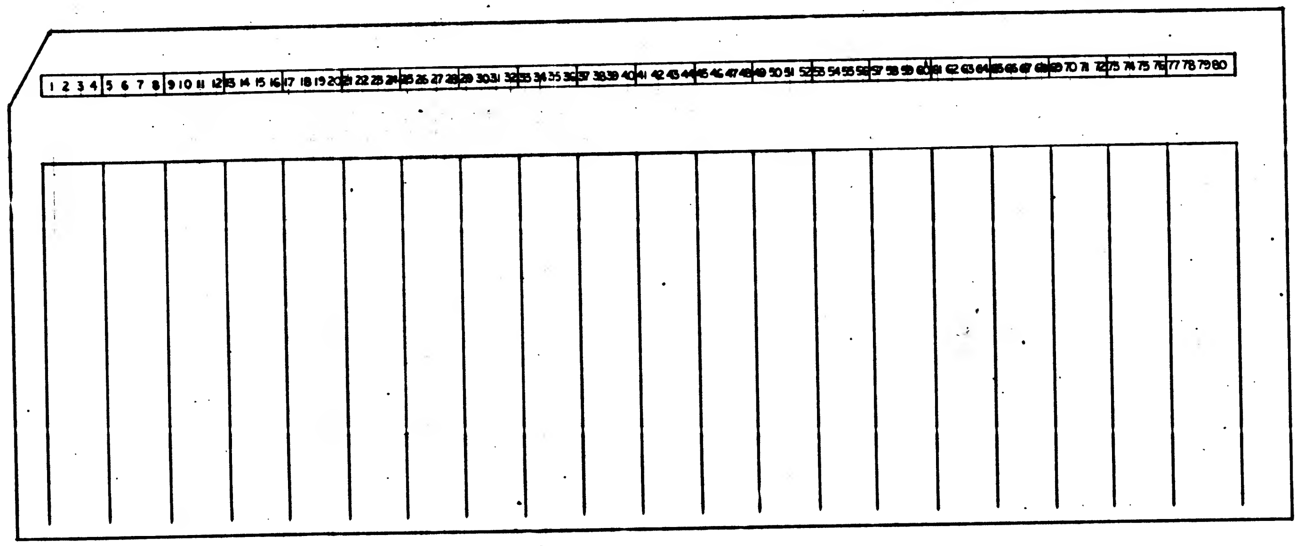
MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

WIREWRAP CARD
DECK-TRAY A L.H.

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006151
SCALE NONE
WT
SHEET 1 OF 1

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TORR 05629	1/7/64	



NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. CARD COLUMNS / USAGE

CARD COLUMNS	USAGE
2	CARD SEQUENCE NUMBER, IN DECIMAL
9 – 26	BINARY MACHINE DATA, IN THE FORMAT DESCRIBED BY GARDNER-DENVER CO. DRAWING NUMBER 820181, REVISION B, FOR THEIR MODEL 14F-15X15X.125 WIRE-WRAP MACHINE.
27 – 33	SIGNAL NAME.
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73 – 79	NASA DRAWING NUMBER OF COVER SHEET FOR DECK
80	REVISION LETER TO DRAWING NUMBER

REF DRAWING NUMBER 1003164

1006152 A

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY | USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± DECIMALS ± ANGLES ±
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DWG. NO. CONTRACT
DRAWN DATE
CHECKED
APPROVAL
APPROVAL Eldon C Hall 7 Jan 64
NASA APPROVAL Hall 1/7/64
MIT APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

WIREWRAP CARD
DECK-TRAY A R.H.

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006152

SCALE NONE | WT | SHEET | OF 1

INCHES
0 1 2
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REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TDRR 05629	1/7/64	
B	REVISED PER TDRR 07509	4/7/64	

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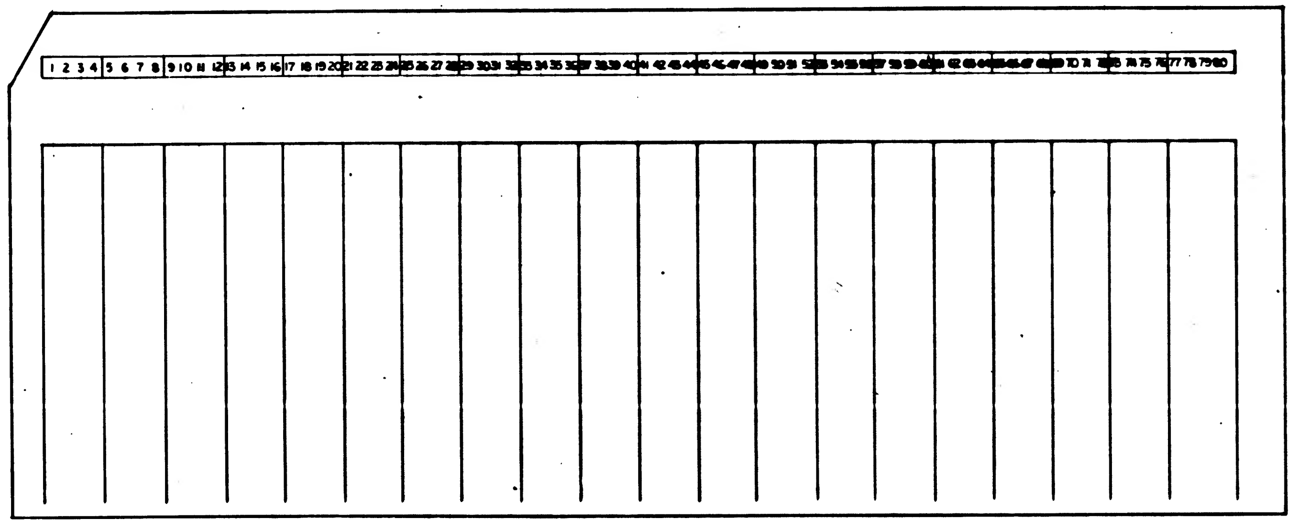

NOTES

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. CARD COLUMNS — USAGE

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73 – 79	NASA DRAWING NUMBER OF COVER SHEET FOR DECK
80	REVISION LETER TO DRAWING NUMBER

REF DRAWING NUMBER 1003164

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

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APPROVAL
APPROVAL Eldon C Hall 7 Jan 64
NASA APPROVAL 1/7/64
MIT APPROVAL

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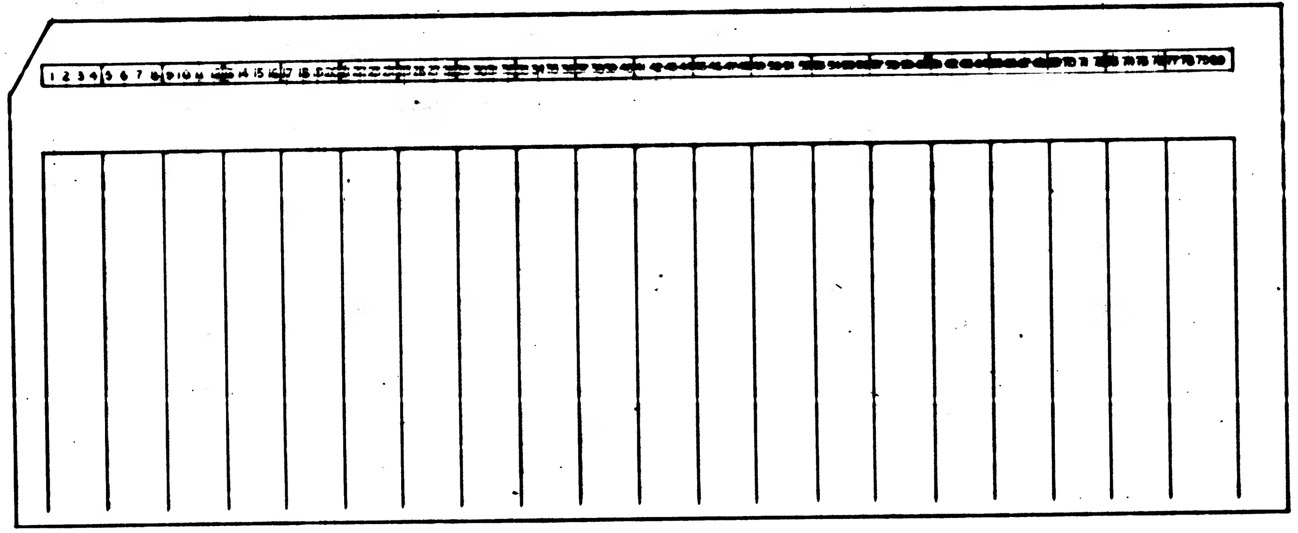
WIREWRAP CARD
DECK-TRAY A R.H.

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006152
SCALE NONE
WT
SHEET 1 OF 1

	REVISIONS		
SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TDRR 05629	1/7/69	
B	REVISED PER TDRR 07509	4/2/69	
C	REVISED PER TDRR 08854 DR D Bennett CHK	4 JUN 69	AWC



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APPROVAL
NASA APPROVAL
MIT APPROVAL

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HOUSTON, TEXAS

WIREWRAP CARD
DECK-TRAY A R.H.

CODE IDENT NO. | SIZE D | NASA DRAWING NO. 1006152

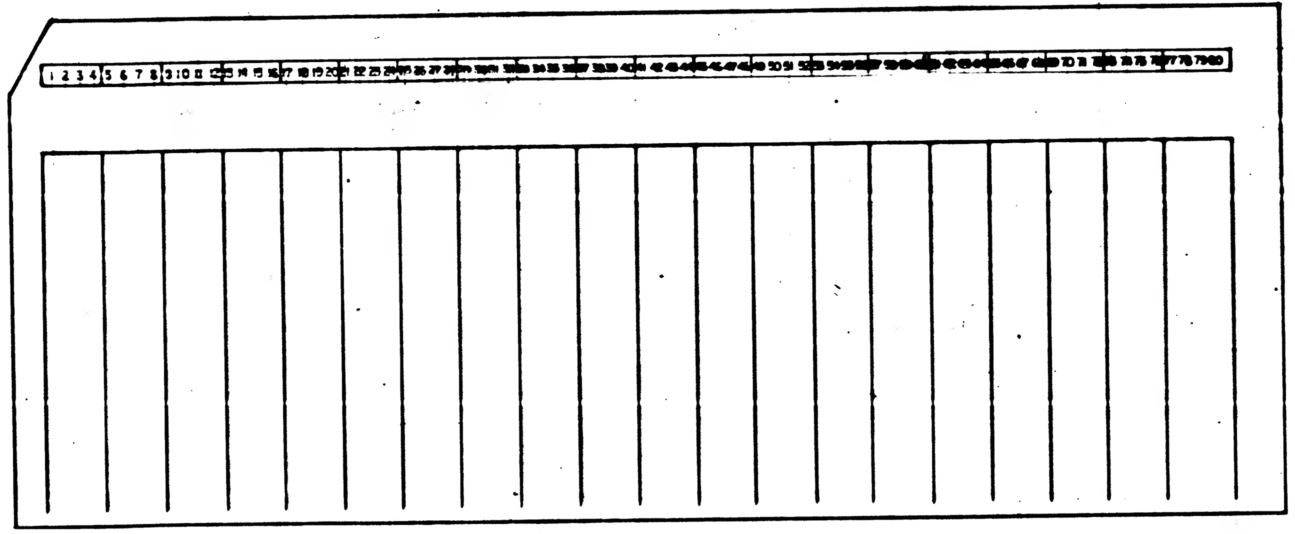
SCALE | UNIT WT | SHEET 1 OF 1

1006152 C

NOTICE — WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE PER TDRR 05629	7/69	GM
B	REVISED PER TDRR 07509	4/2/69	WC
C	REVISED PER TDRR 08854 DR G Bennett CHK CWL	4 Jun 69	AWC
D	REVISED PER TDRR 09793 DR CHK CWL RTM	8/3/69	AWC



DWG REV	DECK REV	TDRR	SYS EFF.
C	C	08854	5
D	D	09793	5

NOTES
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80	REVISION LETTER TO DRAWING NUMBER

REF DRAWING NUMBER 1003164

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON
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DO NOT SCALE THIS DRAWING
MATERIAL
HEAT TREATMENT
FINAL FINISH

NEXT ASSY — USED ON
APPLICATION

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INSTRUMENTATION LAB
CAMBRIDGE, MASS.
DRAWN DATE
CHECKED
APPROVAL
APPROVAL Edward Hall 7 Jan 69
NASA APPROVAL
NASA APPROVAL

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

WIREWRAP CARD
DECK-TRAY A R.H.

CODE IDENT NO. —
SIZE D
NASA DRAWING NO. 1006152
SCALE
SHEET 1 OF 1

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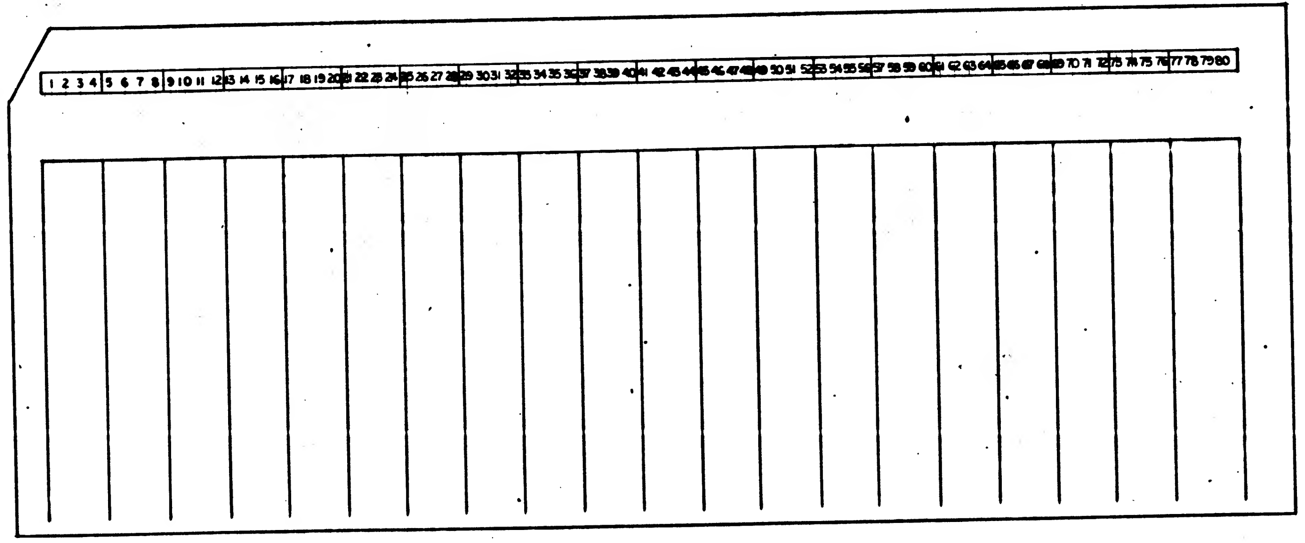

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70 – 72	Y4, IN DECIMAL
73 – 79	NASA DRAWING NUMBER OF COVER SHEET FOR DECK
80	REVISION LETER TO DRAWING NUMBER

REF DRAWING NUMBER 1003176

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.

LIST OF MATERIALS

NEXT ASSY	USED ON

APPLICATION

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FINAL FINISH

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INSTRUMENTATION LAB
CAMBRIDGE MASS
DWG NO. CONTRACT
DRAWN DATE 20 Dec 63
CHECKED
APPROVAL
APPROVAL Eldon C Hall 7 Jan 64
NASA APPROVAL 1/7/64
MIT APPROVAL 1/7/64

MANNED SPACECRAFT CENTER
HOUSTON, TEXAS

WIREWRAP CARD DECK-TRAY B L.H.

CODE IDENT NO.
SIZE D
NASA DRAWING NO. 1006153
SCALE NONE
WT
SHEET 1 OF 1

1006153 A

INCHES
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